

SEQ ID NO:1 Xenopus Claspin nucleotide sequence (AF297867)

ACGCATAGGGCGCGAATTCCAAGGCGGCAGTAGTGAGGATTGGCGGGAGCTGTCAACCCG
GGTAGCACCATTGGCCGCGCTTTGCCAAGAAGAGCAGGTATTTTTGGAACCAGAAGACATCA
GTCTGAAAATTGTGGAGACTGATTCTGACAGTGGTCAAGGCAGCTGTGAAATGGCTGATCA
GAATAAATTATTGGGTTGTGTGGAGGATAAAGATACAGATGATGAAATCTTGGTTCGTAAA
AAATCTAAAAAGAAGGAAGATTGGTGGATAGTGACAGTGACGAAGAATTGGAAATGCGTA
ATTTTGCAGATAATGTAAAGGGGCACTCTGATAATGAGGAGAATGAGGAGACTATGCTCTGC
TTATAGAGAAAAACAAGAAAGATCCGTTCCAGCTGTATGGACAGTGACAATAGTGATCAT
GAGCTTGATGTTCAAATAAGTACAAGTCAAAATGCAGCTGAAATACCTGAGTCAGAACATG
ATAGCTTGAGAGAAGGAACTCATACTGTGAAGCCTAAAACAAGCAAGTCCTTGAAAAAACA
AACTGACACTAATAAAGAGGAAATCGTGAAGAATAAATCAAAGCGCAAAATTCCGAAAGAG
AAGATTAAAGGAGGACAAAACAGAAAGTCAAAAGCAGTTGCTGAAGCTAGGCCAAATTTAA
ATGACAGTGGCTGCTTACTCACAGATGGAGATCTTTTGAACATGGGGTGGAAAATGAGAT
GGATCTTAATGCGAAGAGAGTATCTTGAAGCTATCCGGGCAAAAATGAAAGCAACTG
AATAGTCATTCTGCTGAAAATTTTGAAGACTTTGAACCTTGATACTGAAGGCAATCAAGAAT
CCCCAGAAAAAAGAAAGGAACGAAAAGCTGCGCGACTTGGTAAAGAAGCCATGAAACAAAT
GCACAGTGAGACCCAAAGACTAATACGTGAATCTTCTGTATCTTTACCATATCATCTACCT
GAACCAAAAACAATCGATGATTTTTTCAAAGGCGTCCAAGGCTCTTTCTCAAGAAAAATG
CAATGCAGCTTATAAAGTCAACAAAATACCAGCCCTGCACTGAAGAGAAAAAAAACCCAA
TGAGGAAATATGTGCTGAAGTTCAGAGTTTGATTATGTTTCAAAGGAAGATTTAGAAATC
AGTCCAGAGCAACCTTTACTAAATACTCAGTGTTTACATGCTGCAGTCCATGTGTGTTGCTG
AAAAGTATGCTCGGACTGAGGGGTTAAGTAAATCCACAGAGGCTCTTGTCTATAAAACCT
GAATGACCATGAGGATGCTTTCAGTGATTCAAACATTGTTTCATGAACAAGAAACAGTTGGA
TTAATAACCGTAACGTAAACCTTTCAGACACCTTTATTTCCCAACCCAGAGAGCGTAGTAT
GTGAACAAATCCAGAATGATGTAGTAGAGATGCAACGTATGCCTGAACAACCCACGCATAA
ACCCAAGTTATCCAAGCTTGAAAAGCTGAAAAGCTCTTGGAGTGGACTTGTCTATAAAACCT
CGCCTTTGCCCTGATGATGGTTCTTTTGTCAACTTGGATGAACCAAAGCCGAATAAAGAAT
TTGAAGCTTTGAAGGAGCGTTTCTGAAGCACACTCTGCAAAAGTCCAAACCCAGAAGTGA
GCGGAAAGTCAATCTTAATATTATCCGCAAGGAGACCACTGCTGATGGAAGAAGAAGTGA
AAAGCAGACGTTGTGCCAATAGTTATGGCTACAGAAAAACAGACAAGAGCATTATCAAA
AGCCAGGTGAGAAGCTGCAGGTATTGAAAGTCAAAGTGCAGGAAGCAATGAAAATCCGTCG
CAGTGAGGAGCGCCTGAAGCGCAAGCCTTGTATAAGCTTGACAATGAAGATGGCTTTGAA
GATGATGAAGAGGAGGAAGAAATGACAGAGGAGTCTGAAGATGATGGGGATGGAATGCTG
AGACTGCAGATTATCTTGAGGGGAAGATGAGGAAGAGGTTGGTGATGCTGAAGATGACAA
TGATGAGGATGATACTGTAATGATAGATTGTTGGGAAATGTGCCTGAAATTGTTATCCCA
CTGCCGAGACCAGTAACCTACTGATTCTAGCCTCATGCTGTTCAAGGACAATTCTTCAAAGC
TAGGAGATTTCGTACCTGATGAAAGTGGATGCAAGAGAAGCAGCAGGCTAGAATATGAAGA
AGACTCCCTGTTGCCACAATTAAAAAGAAAACAGCCATAATAGTAGCTTTGAACCTTTAGT
TCAATGATACCATCATACCAGCCATGTAATAAAACAACCTCGAGTTGTGATCAACTCCAATA
ACCTTGGCTTTTCGTACCATCTCCGGTTCATTTCAAAACAAGTTTCTCAGCTCTGCATC
AAAGAGTTCTGGCAAGATGTCTGAACCATCCCTTCCCGTGAAGACTCACAGGATCTATAT
AATGCTTCCCAAGGCCCCAAGGCTCATATCTCTGTGCTGGAAGAACTCTCAATTTCAAT

FIGURE 1A

0000001.101701

TTTCGTTGGAGGATGACACCCAGAGCCAACTGCTTGATGCTGATGGGTTTCTGAATGTTGG
TCGCCATAAATCTAGCTCTGCCAAACACAGGCTAGCTTTGGATACAATGGACGAGAATGCT
ATGGATGCCAATATGGATGAAGTACTAGACCTTTGCTCAGGACAGTTCAAAGAATCTCTTT
CAGGCACATCACAGGCAGCTGAAAGTGATGCTAAGAAACAACCAATGGATGAATTGCTTGA
ATTGTGTTCTGGCAAATTTGTATCTCAAGCTGACTGCTCCACACAAGATTCTTCTGCTTCA
GCTAAGGACCGTTCTACAGCTGTAAAAAAGGACATTCTGATGAAGTGGCAACGGTTTCAA
GTTCAATTCCTTACTGAGAGAGAACAGGAAGAAGATGAGGAAGAAGAATTTGGTGAATTCAA
GCTCTTACCCTGTGATGATTTCGAGAGCGAAAACGAAGAACAAAATGAAGAGGAAGAAGAA
GAAGAGGATGCTAAGGATGATGAAGATGAGGAAGAAATTTGCGAGAAGCAGCAAAAGAGAA
AATTGAGGCTGAATGACTTCATGGAAGATGAAGCCGAATTGCTGGAAGTGATGTAGGTAG
CGGAGATGAAGTATGAAGGAGATGATGATGAGTATGAGGAAGAAGCCATAGATGAAGATCTC
CCATCTGATGAGGAAGTGCAGGATCAAGTCAATAAAATTCATATGAAGTTACCATGGATG
AAGACCAGCGACAGCTTCGTTTCTATCAGGAGCGGTACCTGGCTGATGGGGATCTCCATAG
TGACGGACCAAGGAGAACAAAGAAAGTTTCAGATGGAACATCTTGATGATGCCTCAGAGGTG
GACATGTTCCGCCGAGACTCTGAATTTGGAAGAGGTGGACGGAGAGAATGAGGAAACTGAGG
AAACCGAACTTAAATGGAGGAAGAGCGGTTTCGAAAGGGAACAAATGGCTGCGAGAACAGCC
ACAAGGTAGTAGAGATAACAATGAGGAGGAGGAGGAGGATATTGGAGAAGACAGCCAGTTT
ATGAAATTTGGCAAAGAAGGTCACTGCAAAAGCCCTACAGAGAAAAGTGAGTACAGAGACTA
ATGAACCAAGAAACCTGGGCGCTAGAAATCCATATGAAGTGATCAGGCCTTTCAGCCTCCC
CAAGTTGCGTACTGTTTCGCTGTTAAGCAAACCAAAAGAAGTTTACAGAAGCTGGCAGCT
GTGTGAGACCTGAATCCAAATGCACCTCGAAACTCAAGAACTTTGTCTTCCAACTGTCT
CACCCGGAAAGAAAGAAACTACAGACAAGCCAAGATCAAAGGTACGAAAGAATATAGC
TGTTGCCATGCCTTCCCCTAAACGTTTTTAAAGGGACAGCACCCCTACTGTTAAAAGCCGC
AGTATATTTTCAAGTTGTTGGAGTAGGTTTCTGCGAATATTCCACTAAATCAGTAATTTGTTT
TTGTGTCCTAGTTACAGCAAATTCATATTTTAAATGTAGCTGTGCTTACATGCTACAGTTC
TCGCTTTACTGAAATTTGTGAGATACTTGAAGTAAAGTGTGTTTTCATCATGAAATTAGTTG
GCTGATGTTTATTCATACAGAGGCATGTGAAATACACTGTGATTCTTATTGCTTGTGTC
AAATGTTCTACACTTGTGTTTGTGTTCAAATTAACACAAACCGTATCACCTAATGTAATCTAC
CTCATAGAGATACAGATACCTACAAAATACAGTAATTTTGTGTTACAACCCCATATAT
TTTGTACTTTGCATTCTTATTCTATTCTCTAAATGTACTCCATTTACAAGTGCTGATTAT
AAAGGGGCATTGTACCTATTGTTTCAACACAAGTTCAATTACGTCATGTGCTGAACATGCT
CTCCCCCATCTTAAATATGTTTTTCTTATGAATTGCATTAAACAGGGCACAACACTGAA
ACTATAAGTTTATGGGAGTGCTGGTAAAAACAACAACCTATTAGTGCTTTATAATATAAAA
AATTAGGTTATTATATGGATTGTTTTTAATTAACAAATAAGCAGAACAAATTTAAACAA
GTCCTATTTATTTGCTCATGTTAAATAAAAGTGATATATCCATATACTACCCGTTTAAA
CTGTGTAATGAATGTGTTTCTGTGAATATATTTTATTGTACATTGTTATAAATGTTTGTGA
GATTTGTTAATAAATACATTTTTTTAAAAA

FIGURE 1B

SEQ ID NO:2: Xenopus Claspin amino acid sequence

MAALCEEEQVFLEPEDISLKIVETDSDSGQGSCEMADQNKLGLGVCDKDTDEILVRKKS
KKEVLVDSDEELEMRFADNVKGHSNEENEETMSAYREKPRKIRSAVLDSNDSHED
VQISTSQNAAEIPESEHDSLEKETHVVKPKTSKSLKKQTDTNKEEIVKNKSKRKIPKEKIK
RRTKQKSKAVAEARPNLNDSGCLLTDGDLFDNGVENEMDSNEEDSLEAIRAKMKS
KLNHSAENFEDFELDTGEGNESPEKRKERKAARLGKEAMKQMHSETQRLIRESSVSLPYHLPEPK
TIHDFFKRRRPLCQGNAMQLIKSTKYQPCTEEKKKPNEEICAEVPEFDYVSKEDLEISPE
QPLLNTQCSHAAVLCVVQNDARTEGLSKSTEAVVTGQMNDHEDAFSDSNIVHEQETVGLIT
VTETFQTPFIPQPESVVCQIQNDVVEMQRMPEQPTHKPKLSKLEKLKALGVDLSIKPRLC
PDDGSFVNLDEPKPNKEFEALKERFLKHTLQKSKPRTERKVNLIIRKETADGKEELKAD
VVPIVMATEKPKDSIYQKPGKQLQVLKVKLQEAMKIRSEERLKRQALYKLDNEDGFEDDE
EEEEMTEESEDDGDGNAETADYPGGEDEEEVGDAAEDDDEDDTVNDRLLGNVPEI
VPLPRPVTDDSSMLLFKDNSSKLGDSLPGESGCKRSSRLEYEEDSLLPQLKENS
SHNSSFELISSMIPSYQPCNKTRVINSNNLGFSPSPVHFKTSFLSSASKSSGKMSEPS
LPVEDSQDLYNASPEPKASYLCAGRNSQFQFSLEDDTQSQLLDADGFLNVGRHKSS
SAKHRLALDTMDENAMDANMDELDDLCSGQFKESLSGTSQAAESDAKKQPMDELLE
LCSGKFVSQADCSQDSSASAKDRTAVKKDISDEVATVSSSFLTEREQEEDDEEEFGE
FKLLPCDDSESENEEQNEEEEEEDAKDDEDEEILQKQKRLRLNDFMEDEAELSGSDV
GSGDEYEGDDDEYEEEAIDEDLPSEELQDQVNKIHMKVMTMEDQRLRFYQERYLADG
DLHSDGPGRTRKFRWKHLDDASQVDMFRRDSELEEVDGENEETEETELKWRKERFE
REQWLREQPQGSRDNNEEEEEEDIGEDSQFMKLAKKVTAKALQRKVVSTETNEPKKPG
PRNPYEVIRPFSLPKLRTGSLSKPKPEVLQKLAASDLNPNAPRNSRNFVQTVSPGKKE
ETDKPRSKVRKNIIVAMPSPKRFKRDSTPTVKSRISIFQLLE

FIGURE 1C

SEQ ID NO:3

Human Claspin nucleotide sequence AF297866

GACGGCGGGAGCCGCTGCTCTCCGGCTGAGGGAATCAGAGACAGCTCCGTCCTAGTGGAG
CGCAGGGGAGGCAGAACTCATGACAGGCGAGGTGGGTTCTGAGGTTACCTAGAAATCAAT
GACCCAAACGTCATTTCCAAAGAGGAAAGCAGATAGTCTTCAGATAGTGGACAGGGCAGCT
ATGAAACAATTGGACCCCTTGAGTGAAGGAGATTGAGATGAAGAGATATTTGTAAGTAAGAA
GTTGAAAAACAGGAAGGTTCTACAAGACAGTGATTCCGAAACAGAGGACACAAATGCCTCT
CCAGAGAAAACTACCTATGACAGTGCCGAGGAGGAAAAATAAAGAGAATTTATATGCTGGGA
AAAAATACAAAAATCAAAGGATTTACAAAACTGTGGCAGACAGTGATGAAAGTTACATGGA
AAAGTCTTTGTATCAGGAAAATCTTGAAGCGCAAGTAAAACCTTGCTTAGAGCTGAGTCTT
CAGTCTGGAACCTCTACAGACTTTACCACTGACAGAAAGAGTTCCAAAAAGCACATACATG
ATAAAGAAGGAAGTGCAGGAAAACGAAAAGTAAATCAAAAAGAAGACTTGAGAAAGAGGA
GAGAAAAATGGAAAAATTAGACAGCTAAAAAGAAGGAAACAAAAACCAGGAAGATGAT
GTGAACAGCCATTTAATGACAGTGGCTGTCTTCTGTGGATAAAGACCTTTTGTAACTG
GGTTGGAGGATGAAAATAACTCTCCATTGGAAGATGAAGAGTCATTAGAATCAATAAGAGC
AGCTGTAAAAAACAAAGTAAAAAGCACAGAAAAAGAACCATCTTTGGAGAGTGGGGTC
CATTCAATTTGAGGAAGGAAGTGAGTTATCAAAGGAACACGAGGAAGGAAAGAAAGGCAG
CCAGATTAAAGTAAAGACCATTAACAACTGCATAGTGAGACTCAGCGCCTTATTCGAGA
GTCTGCACTGAACCTTCCATATCATATGCCTGAGAATAAAACCATTATGATTTCTTCAA
CGTAAACCCCGGCCCACTTGCCACGGAAATGCCATGGCACTATTGAAGTCATCTAAATATC
AGTCAAGCCATCACAAGAAATCATAGACACTGCAAACTACTAGTAAATGAACAGTGATCA
CCATAGTAAAGTTCTGAGCAGACAACAGGTGCAGAAAATGAAGTGAAGAACTAATGCACCTC
CCTGTAGTTTCAAAGGAAACCCAGATCATTACTGGATCAGATGAGTCTTGCAGGAAGGATT
TGTTAAAAATGAAGAGCTAGAAATTCAGGAGAAACAGAAGCAGAGTGACATTAGACCTTC
ACCTGGGGACAGCTCAGTGTGTGAACAGGAATCCAACCTCTCTCGGGAACAATCACAGTGAG
GAATGTGCAAGTTGGAGGGCTTGTAGCATTGAACTCATGCCCTGGAGGGTGAAGGCCCCC
AAAATCCAGAAGAAACAGATGAGAAAGTGGAGAGCCTGAGCAGCAAAATAAATCATCAGC
AGTTGGGCCACCTGAAAAAGTGAGACGGTTTACTCTGGATAGACTTAAGCAACTGGGAGTA
GATGTTTCCATTAAACCACGGCTAGGTGCTGATGAAGATTCCTTTGTGATACTTGAACCTG
AAACCAACAGAGAACTGGAAGCCTTGAAGCAGCGTTTCTGGAAGCATGCTAATCCAGCAGC
CAAACCCAGGGCTGGTCAGACAGTGAATGTGAACGTCATAGTGAAGACATGGGCACTGAT
GGAAAGGAAGAGCTAAAAGCAGATGTGGTACCTGTGACTTTAGCACCTAAGAAGTTGGATG
GAGCAAGCCACACAAAACCAAGGTGAAAAGCTTCAGGTGTTAAAAGCTAACTGCAAGAAGC
AATGAAACTCCGAAGGTTTGAGGAGCGCCAGAAGCGCCAGCACTGTTTAAATTAGATAAT
GAAGATGGGTCTGAGGAAGAGGAGGAGGAAGAGGAAGAAATGACAGATGAGTCTGAGGAAG
ATGGAGAAGAGAAGGTAGAGAAAGAGAGAAAGAGGAAGAACTAGAGGAAGAGGAGGGGAA
AGAAGAGGAGGAGGAAGAGAAGGAATCAGGAGACTGCAGAATTCCTTCTTAGTAGTGAA
GAAATAGAAACAAAAGATGAAAAGAAATGGATAAAGAAAAATATGATGGCAGTAGTGAA
TTGGCAAGGCAGTTGGCTTCTCTCTGTTCCCAAGTCTCTCTCATCAGATTCTACTTTACT
TCTGTTTAAGGACAGCTCTTCCAAGATGGGTTACTCTCTACTGAAGAAAAATCAGAAACA
GATGAAAACCTCAGGCAAGCAGCCTAGCAAACCTGGATGAGGATGATTCATGTTCAATGCTAA
CAAAGGAGAGCAGCCACAATAGCAGCTTTGAGCTGATTGGCTCCACGATTCCATCCTATCA

FIGURE 2A

GCCTTGCAACAGACAAACAGGCCGTGGGACCAGTTTTTTCCCTACAGCAGGAGGATTTCAGA
TCTCCTTCCCTGGGCTATTTTCGAGCCAGTTTGGTCAGCTCAGCTTCTAAGAGTTCAGGGA
AACTGTCTGAGCCTTCACTTCCCATAGAGGATTCCAGGATCTGTATAACGCCCTCCCCAGA
GCCTAAGACACTTTTCTAGGAGCAGGAGACTTCCAGTTCTGTTTAGAAGATGACACTCAG
AGCCAACTGTTGGATCGAGATGGGTTCTTAAATGTTAGAAACCACAGGAATCAGTACCAAG
CTTTGAAGCCTCGATTGCCATTGGCCAGTATGGATGAGAATGCCATGGATGCCAACATGGA
TGAGCTGTTGGATTTTGTGACTGTACTGGAAAGTTCACATCTCAGGCTGAAAAACATCTACCCAGG
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CTCAGGATGCCTCCACTCCAGCCTCATCAGAGTTAAATAAACAGGAGAAGGAGAGCAGCAT
GGGTGATCCAATGGAAGAAGCACTTGCTCTTTGCTCAGGCTCTTTCCACAGACAAGGAA
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TGATGATGAAGAAGAACTCCTGAAGCGATCTGAGAAGTTGAAAAGGCAAATGAGGTTGAGG
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ATGGGGAAGAATTTGATGAATATGAAGAGGACGTAATTGATGAAGTACTTCCCTTCTGATGA
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CAGCTACGTTTATACCAAGAGAGGTACCTTGTGATGGGGATCTGCACAGCGATGGTCCTG
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CAGAGACTCTGATGATGATCAGACTGAAGAACAGCTTGATGAGTCAGAGCCAGGTGGAGG
AAGGAGCGAATTGAACGAGAGCAGTGGCTTCGGGACATGGCACAGCAGGGGAAAATTACAG
CTGAAGAAGAAGAAGAAATTGGGGAGGACAGTCAGTTTATGATACTGGCCAAGAAAGTTAC
AGCCAAAGCACTGCAGAAGAATGCCAGTCGCCCTATGGTTATTTCAGGAATCAAAGTCTTTG
CTCAGAAATCCTTTTGAAGCCATCAGACCAGGAAGTGCTCAACAGGTGAAGACAGGCTCAC
TGCTAAACCAGCCCAAAGCTGTGCTTCAGAAACTGGCTGCTCTCTCTGACCATAACCCCAG
TGCTCCTCGAAATTCAAGAAACTTTGTCTTTTCATACACTTTCTCCTGTCAAGGCTGAGGCG
GCAAAGGAATCGTCTAAGTCTCAGAAGATCCCAGAGAAGGACTCTGACTGGCTCACCTGGA
GTGGAGCTCCTATCCCTGGATTCTTCAGGCTTTCATTTGACCCACATGGTTAAGCTGGGAG
AGACAGAGTCCAAAGAGAGGCGGAGAAGGGCTATTCTGGGCAGAACAAACAATTGATGACT
TTATGGCTCTGTGGTCTGGGCAGAACTGCATAACCCTAGATCACCAAAGCTGAGAGCCTTT
AGGAGTGAGGATTTGGGCCGGGCATGGTGGCTCACGCCCTGTAATCCCAGCACTTTGGGAGG
CCGAGGTGGGTGGATCACAAAGTCAGGAGATCAAGACCAACCTGACCAACATGGTGAGGCC
CCATCTCTACTAAAAATACAAAAATTAGCTGACGTGATGCATGCACCTGTAATCCCAGCTA
CTCGGGAGGCTGAGGCGGAGAATCGCTTGAACCCGGGAGGTTGGAGGTTGCGGTGGGCCG
AGATTGCGCCACTGCACTCCAGCCTGGGCGACAGAGCGGGACTCCATCTCAAAAAAAAAA
AAAAAAAAAGTGAGGATTTGGGTCACCCCAGGCTGAAGGCCAGGGGAACCTGAATGATAAGGG
AAGGGAAAACCTTAGGCCACAGTCTGATTAGAAATGGGGCTGAATTCACCCCTGTTTTTCCCT
TTACTGGAGATTCAATTTGAATTACTCTGCCTCCCTTCTTATTCCTTTTCCCTTTTAAAAA
GTCATCATAATCATAAAAATTTCTTTTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2B

SEQ ID NO:4
Human Claspin amino acid sequence

MTGEVGVSEVHLEINDPNVISQEEADSPSDSGQGSYETIGPLSEGDSDDEEIFVSKKLKNRKV
LQDSDSETEDTNASPEKTTYDSAEENKENLYAGKNTKIKRIYKTVADSDESYMEKSLYQE
NLEAQVKPCLELSLQSGNSTDFTDRKSSKKHIHDKEGTAGKAKVSKRRLEKEERKMEKI
RQLKKKETKNQEDDVEQPFNDSGCLLVDKDLFETGLEDENNSPLEDEESLESIRAAVKNKV
KKHKKKEPSLESGVHSFEEGSELSKGTTRKERKAARLSKEALKQLHSETQRLIRESALNLP
YHMPENKTIHDIFFKRKPRPTCHGNAMALLKSSKYQSSHHKEIIDTANTTEMNSDHHSKGSE
QTTGAENEVETNALPVVSKETQIITGSDSCRKDLVKNEELEIQEKQKQSDIRPSPGDSSV
LQQESNFLGNNHSEECQVGGLVAFEPHALEGEQPONPEETDEKVEEPEQQNKSSAVGPPEK
VRRFTLDRLKQLGVDVSIKPRLAGAEDDSFVILEPETNRELEALKQRFWKHANPAAKPRAGQ
TVNVNVIVKDMGTDGKEELKADVVPVTLAPKKLDGASHTKPGKQLQVLKAKLQEAMKLRRF
EERQKRQALFKLDNEDGSEEEEEEEEEEMTDESEEDGEKVEKEKEEEEEEEEGKEEEEEEE
EGNQETAEFLLSSEEIETKDEKEMDKENNDGSSEIGKAVGFLSVPKSLSSDSTLLLFKDSS
SKMGYSPTEEKSETDENSQKQPSKLDDEDDSCSLTKESSHNSSFELIGSTIPSYQPCNRQT
GRGTSFFPTAGFRSPSPGLFRASLVSSASKSSGKLSEPSLPIEDSQDLYNASPEPKTLFL
GAGDFQFCLEDDTQSQLLDADGFLNVRNHRNQYQALKPRLPLASMDENAMDANMDELDDLC
TGKFTSQA EKHLPRKSDKKENMEELNLCSGKFTSQDASTPASSELNKKQEKSSMGDPME
ALALCSGSFPDTKEEEDDEEEFGDFRLVSNDFDSDEDEHSDSGNDLALEDHEDDDEEEL
LKRSEKLKRQMRRLRKYLEDEAEVSGSDVGSEDEYDGEEDIEYEEVDIDEVLPDDEELQSQI
KKIHMKTMLDDDKRQLRLYQERYLADGDLHSDGPGMRMRKFRWKNIDDAQMDLFHRSDDD
QTEEQDDESEARWRKERIEREQWLRDMAQQGKITAEEDDEEIGEDSQFMILAKKVTAQALQK
NASRPMVIQESKSLLRNPFEAIRPGSAQQVKTGSLNQPKAVLQKLAALSDHNPSAPRNSR
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FIGURE 2C

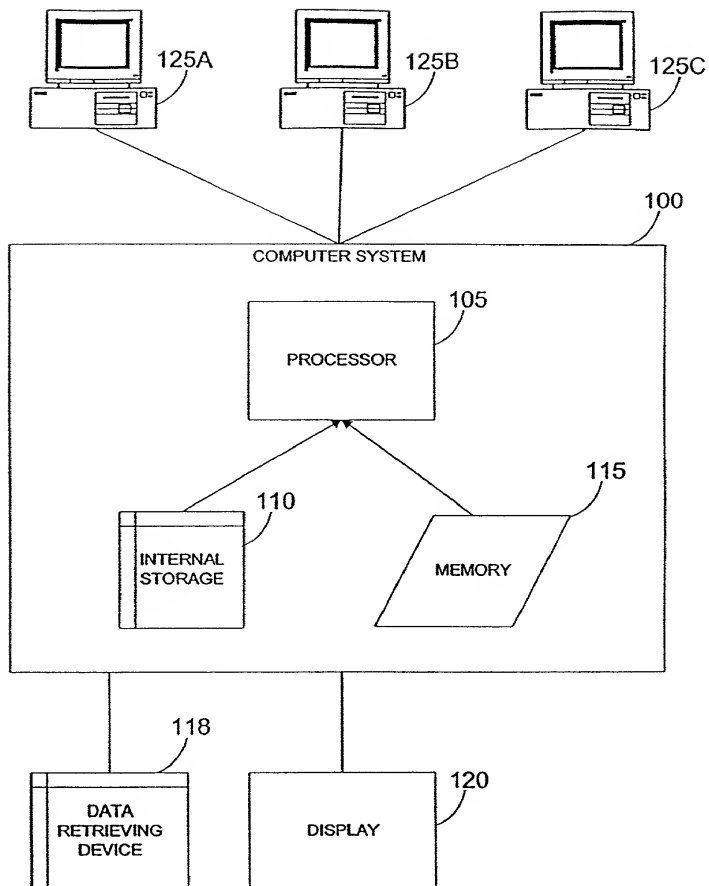


FIGURE 3

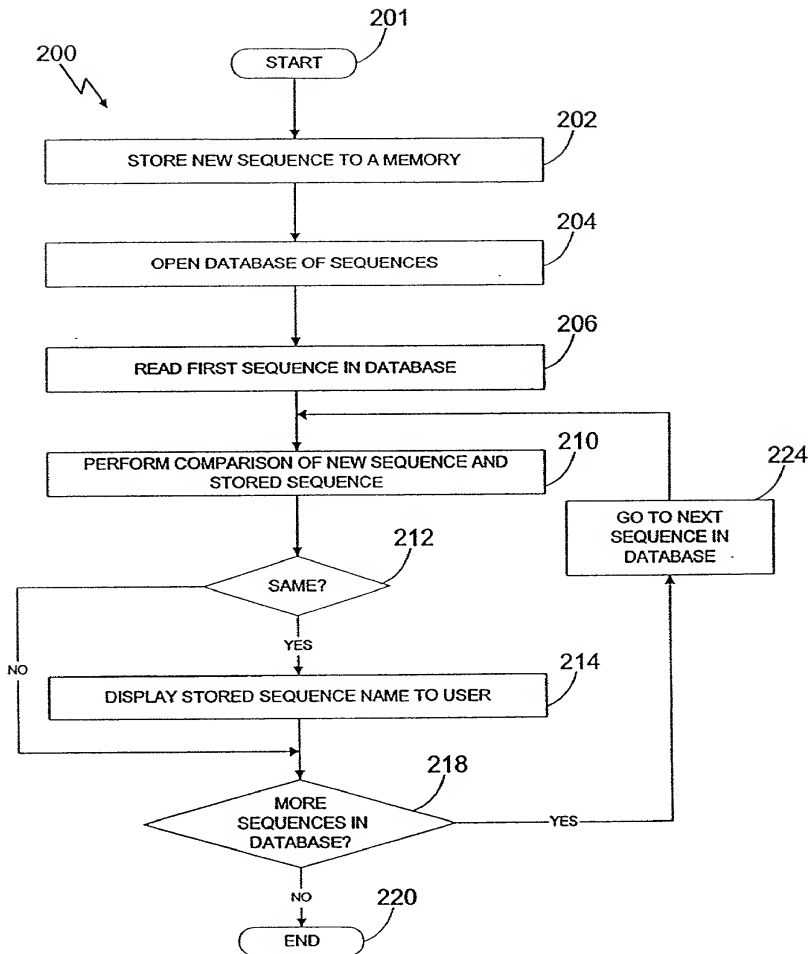


FIGURE 4

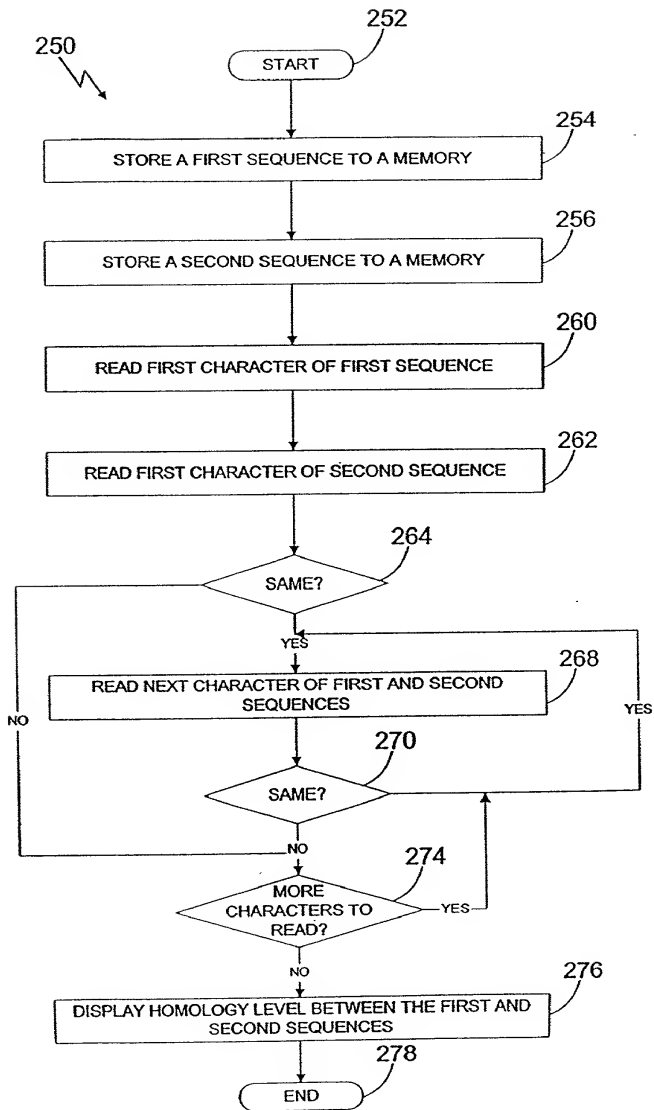


FIGURE 5

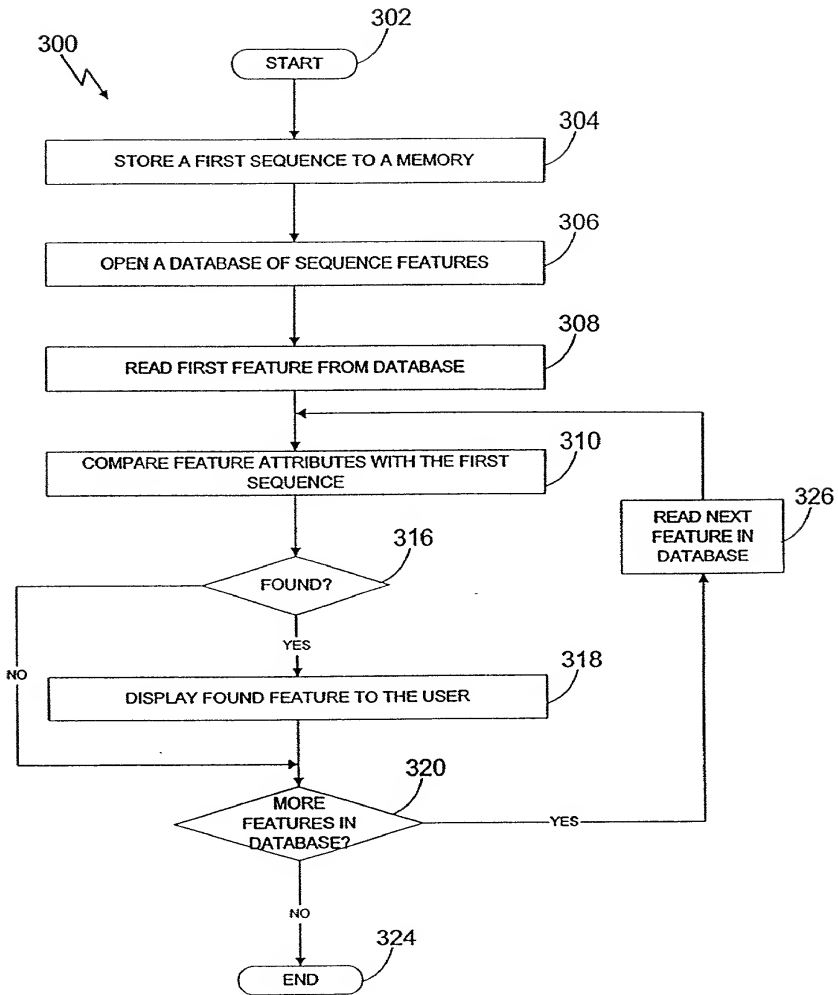


FIGURE 6

Human_Claspin_Genomic Sequence Length: 58837 Type: N

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1  AAGCAGGTAG TTTTAACTT TACTCCAGAG GAATAGCAGT ACTAAAAATG
51  TAACATGGTA ATCTTCCTCA ATTTGCAGAA AAAGAAATAA AAGACATAAT
101 TCAGTCAATT ATCTTCCTCC AAACCTTCTT AAGCCTTTGG TTCTGCTTTT
151 TGTCTGCCAA GGAGCACAAT ATAAATAGAG CACTTTTAGA ACTGGCTGAG
201 CATGTTAAGT TCCATGGCTG ATTTTTTCCC AGACTTGTAA TGTCAGAATT
251 GCTTTTTAAA TATTTTTTTG TGATATAATA ATATATCCTA CTAGTTAAAA
301 TGTTTCCGCA TTCAAATGAC CAGATTAAAC GCATCAGTAC TGCAAAATGC
351 TTCTCATGAA GTGCTATACT TTCGGGTGCC CTACTCATT AACTATTATTG
401 AGAATCATGA TCTCATCCAG TGTTTTCTAG TTACAAAAAA GAACAAGTTT
451 CTTTTCTTTT TTTGAAATGG AGTCTTGCTC TGTACCCAG GCTGGAGTGC
501 AGTGGTGCAC GATCTCAGCT CACCACAATC TCCGCCTCCC AGGTTCAAGC
551 AATTCTCCTG CCTCAGCCTC CCAAGTAGCT GGGACTACAG GTGCCCCGCA
601 CCAGCCCGGG CTAATTTTTG TGTTTTTAGT AGAGTCAGGG TTTCCACCATG
651 TTGGCCAGGC TGGTCTCAAA CTCCTGGCCT CAAGTGATCT GACTGCCTCA
701 GCCTCCCAAA ATTCTGGGAT TACAGGCATG ACCCACTGCA CCCAACCTCC
751 AAAAAAGAAC ACATTTCTGA GAACTAAAT TAGTTACCTA AGTTTATGAA
801 GCCCTCTATG GGACAGGTTT AGACTAATCC CTGTAAGAGT AGCAACCTCAG
851 ATGTTTCCTT TGTGCCATT TATCAACTTG ATAAACAAGG ATTGTTGGAT
901 GACTACAACA ATGAAGGGAC AGAGAGGTCA AGGTGATTC CAGGTTTCTA
951 AACTGGTGAG TGGATATGGT TCCACTCACC AAAATTGAGA ATACAGGTTG
1001 CTAATTCTAA ATACAGACTC ACTTTATCTT GGCACAAGTT AATGTTGATAA
1051 ATAAAAGTTT CCTGGGGATG GGAGGAGTAT GAAGTTGGTG CTTAATGGGC
1101 ATAGAGTTTC AGTTTGTCAA GATGAAAGGA GTTCTAGGCC AGGCCCGTTG
1151 GGTACACCTT GTAATCCAG CGCTTTGGGA GGCCGAGGTG CATGGGTCAC
1201 TTGAGGTCAG GAGTTCAGA CTAGCCTGGC CAACATGGTG AAACCCCGTC
1251 TCTCCTAAGA ATACATACAA AAAAGTAGCC AGGCGTGGTG CAGGTTGCCT
1301 GTAATCCAG CTACTTGGGA GGCTGAGGCA GGAGAATTGC TTGAACCCGG
1351 GAGGCAGAGG TTGCAGTGAG CCAAGATAGC ACCATTGTCAT TCCAGCCTAG
1401 GCAACAAGAG CAAAACCTCA TTTCAAAAAA AAAAAAGAAG AGAAAAAGAA
1451 AAGAATTCTG AAGATTGGTA GATTGGTTAC ATAACAATTT GAATGTACTT
1501 CTGAAGTGA TACTTTAAAA TGGTTAAGAT GGTAAATTTT ATGTTATATA
1551 TGTTTTACCA CAATAAAAAA TGAATGAAAG GTTTTCTCTT CCTAGCTTAC
1601 CCATGTCCAC CCATTGTTCA AATTGGAGCT TTCTCTCTTA GCTTCTGTGA
1651 TGAGTGAAAA GGTGCTCCCC AAAGATATTT TAAATACTA ATATAAGGAA
1701 TATTATTTC AATTCATT TTCAGAGGGA GCTCAAGAAG TTGTCAGTG
1751 AATGAATTAA TTAGTTCAAC AAATATTTAT CAGTTTTCCT ACTTGAACC
1801 TGGGATGTTT TAAGTCTTTT GTTCTCAAAG TGTGGTCTCC AGATCAGCAA
1851 CACTAGCATC ACCAGGGAAT TTGTTAGTAA TATACATTC TGTGGGGCAC
1901 GGTGGTTCAT GCCCGTAATC CCAGCACTTT GCGAGGCCGA GATGTGCAGG
1951 TTGCTTGAGT CCAGGAGTTT GAGACCAGCT TGGGCAACAT GGTGACACCC
2001 CGTCTCTACA AAATAAAAAA TTAGCTGGGC ATGGTGGTGC ACACCTGTAG
2051 TCCCAGCCAC TTGGGAGGCT GAGGTGGAAG GGTGCTTGA GCTGGGAGG
2101 TTGAGGCTGC AGTGAGCTGT GATCATGCCA CTGCACTCAG GGAGAAAAAG
2151 AAAAAAAGGA AAGAAGAAG TATACATCTC TGGACCCCA TTCAGACATA
2201 CTGAATCAGA AACTTTGGCA CTAGGACCCA ACAATAGCTG TTTTACCAG
2251 CCTTTTCAGT TATTCTGATG CATGCTCAAG TTTAAGAAAG ACAATTTCTAG
2301 GTTGCAATGA TACAGAGGCC AAGAAACAA AACGCCTGTT CTCTTGGAGC
2351 AACACAGAG AAATAGATAT AAATAAAATT TCAGGCAAAG GAAAGTGTTA
2401 TCAGGGAAC CAGCATAGGA TAAGGAGGCA GAACACAGAG GATGCTCAGG
2451 CAGGGTCTTT CTGAGGGGTA TGAGCTCTGA AGTCACATAG AGTCTGAAA
2501 TTGGCTCCAC CAGTTTCTAG CCTTTTAAAA GTCTGGTTTC CTCATCTTCT
2551 AAGAAGAGA TAATAATATT ACAAGTTTAC TCTGAAGATT AAATAAGATA

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FIGURE 7A

2601 ACACCTTATAA AATCCTTGCA ACTGTTTCTG CCACTGAGTA AGGCTTCAAT
2651 AAACGTTAGC CCTCCATATA TGATGGGGAG TGCCATAGAT GTATACCTGG
2701 GAATCGTTGA TGTAGAAATT AATAGTAAAT GGATGAAAAG GTGGATAAAC
2751 CAAGACACAA AAGAGAGAAG GGATGGATGA TGGGCTCTTG TTGGTGGGGA
2801 CAGAAGTGGG TTGAGAGATG GTGGGGAAGT AAAGAAATGA AGATGTGGAG
2851 AGGGAGCTTT TTTCTGAACC CAGCTAAAGG TGGAAACTTG GAAGAGGAGG
2901 CCAGTGGATT GGGTGAAGAA CCAACCATTG GGTATACCTG TGACTGAGGA
2951 GGTTCCTCAGG ATGCAGGACT TTTAGTGCTA AAACTAGGAA AGTCCTGGGC
3001 AAGCTGGGCC AAGCTGGCCA CACTGGCAGT GGATATGACC ATGGAGGGTG
3051 AAGTGAGCAA TAAATACTCT GACCTTCTCT TCCTGGTGGC CTCTCATCTC
3101 CTTACAGTAA CCTTATAAGG TGCTTTTACA GGGGCTTGAC CCAACCAGAA
3151 GGGCAAGGGA GCTGGGATAA TACAGTCTAG AGAGGTCAGC CTTGCTTGA
3201 CACACACCAG GGTAAAGGAA GGACAGAGAA TTGACCTGGA GAGGCAAAAA
3251 ATAATGGCCA GCACAGTGGC AAAACTGGGA TTAGAATTGT CTGGGATAGG
3301 CCAGGTGCGG TGACTCACAC CTGTAATCCC AGCACTTTGG GAGGCTGAGA
3351 CGGGCGGATC ACGAGGTCAG GAGTTCAGAA TCAGCCTGGC CAAATGGTG
3401 AAATCTTGTC TCTACTAAAG TTACAAAAA TTATCTGAGC GTGGTGGCAC
3451 ATGCCATATA TCCTAGCTAC TCAGGAGGCT GAGGCAGGAG AATCGCTTGA
3501 ACCCGGGAGG CGGAGGTGTC AGTGAGCCGA GATCAGCCCA TTGCACCCAG
3551 CCATGGTGAC AGGGAGAGAC TCTGTCTCAA CAAAAAATAA AAAAAAATAA
3601 AAAGAAGTGT GTCTGGGATA AACCTGATTT CAGAGCTTCA ATTCTTTTTC
3651 CAGCCTTGTT TAAAGGTAGA ATGCCCTCTA GGAGTGATGA GTGCTTTCTA
3701 CATCTCATAA TTAACCTAC AGAGAATTAT AAAGATTATC CAACCATATT
3751 CTTTGGTATC TGAGCAGCCC ACAAACCTTT TTTCTTTAGA GACAGGTCT
3801 CCTCTATCG CCTACGCTGA AGTGCAGTGG TGCGATCAT ACTCACTCTA
3851 ACCTCAAACCT CCTGGACTCA AGCCATCCTC CACCTCGGCG TCCTCCAAAGC
3901 GTTGAGATTA CAAGCGTGAG CCAATGGAGCC CGGCCCTCTT TAAAAATAA
3951 AAGTGGGCGG GGCACAGTGG CTCACGCCCT TGAGGGGTAT GAGGCTTCCC
4001 AGCACTTTGG GAGGCCGAGG CGAGGATCAT TTGAGATCAG GAGTTCGAGA
4051 CCAGCCTGGC CAACATGGTG AAACCCCGTC TCTACTAAAA ATACAAAAAT
4101 TAGCCAGGGG TTGGTGGCGG GTGCCTGTAA TCCTAGCTAC TCAGGAGGCT
4151 GAGGCACGAG AATCGCTTGA ACCCGGGAGG CGGAGGTTGC AGTGAGCCGA
4201 GATCGCGCCA CTGCATTTC TCTTGGCTAA CAGAGGGAGA CTCCATCTCA
4251 AAAAAAATAA AAGTGTGTGT GTATACACAT ACATGTGTAT GTGTATATAT
4301 GTGTATGTAT ATATGTGTGT ACATATGTGT GTGTGTGTGT ATATATATAT
4351 ATATATATAT ATATATATAT ATATATATAT ATTCAGTGTG AAGTGTCATG
4401 TACAAGAGGC ACACAGGATC TAGCTGCTCC AGAAATGAAG TCAGTGGAGA
4451 AAATCCCACT GGGAACTTG GAATTCCTCT AAAAAATTCA GGTACAGGAC
4501 ACTCCAGGTG GCCCAGGAAC CGTTTCCCAG CTCACCTCCC CCCGAAAGAC
4551 TCACCCCTCC AATCGCACTC GATGCTTTGG CAAGTGTCAA AGGTCAAAGA
4601 CCACGGCTCG CCTGGTACCG ACTGCCCGCG CCCCGTGCAC CTCACGCTCC
4651 CCCAGGCTCC GCTACCAGCA GCTGCGACCC GCCAACTCAG CCTGGSTAAT
4701 AGGAGATTGG GCGGCCAGAG GCGCTGCGTG ATTGGTGGGT CGGAAGGGGG
4751 CGGGGACTCG CTGGAAAGCC CCTCTGGAT TGGTGCAAAC CATCTGGGTG
4801 GGACCTCCAC TCTGGCTGGG CGGGAAGACA AGAACAGCAC TGCTGGGCTG
4851 GAGACGGCGG GAGCCGCTGC TCTCCGGCTG AGGGAATCAG AGACAGCTCC
4901 GTCCCTAGTG GAGCGCAGGG GAGGCAGAAG TCATGACAGG CGAGGTGGGT
4951 TCTGAGGTGA GTTTATGCAC ACGCCCCCCA CGGGGGCTTA GAAGGCCGGG
5001 CACCGAGAGG TTAGTGGGGG CCGGGGTAGA CCCCGTGCAC CCGAGCGCGC
5051 CGGGCGGGAG GACTCGGGCT CCGGGCGTTC CGCGCGCGCG CTCCGCGCGC
5101 CTCGAGACTC GGCCGGGATG GGTTCGACCC GGCATCCCG TCCGCGCGCC
5151 GGGCTTCCCG CGCTTCGGGC TCCGTGGCCG GAGAGCTCCA GGCTCTCGCC
5201 GCGCGCACTG CCGGCAGCCC AGCCCCCTTT CAGCCGCTTC CTGCCGCCAG
5251 CCTCCCCCTT TGGCGCGTTT CCTGTGCGCG AAGCTCTCC CCTCAGGGTG

FIGURE 7B

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5301 CTCTGAAAGC CGGGAGGCTC TAGCCGAACC CGGCCGCAGC GGTGCGGGGG
5351 GATTCTCCGC AGAGAGAGGG CGAGCGAGGG TGTTAGGGAG TTCCACACTG
5401 GGCCCTGGGAG GGGCCCTGGA GGTCATCGCG CGCAGGCCCT TTGCGTTTTT
5451 CGACCCGGGCC CCGAGTGGGG AAGTCACCGC TGGGCTCCCT GGCTGGTGGC
5501 TGGCAGCTCC CTGGCGAAAT TGGGCATAGA AAACAGATGT TTCCAGAGCT
5551 GTGTCCTTTC TGGGCCGGAT TCGGGCAAGG CACTCCC GCC TTAGGAGCAA
5601 AATTTAAAGG GGCGCCAAAA CCTCAATCA AACTCATATT TTAATGCAAT
5651 ATTTTTAAAA AACCAAAATT AATGCAAAAA CTTTTTATGA TTTGATATTG
5701 AACAAAATAT CAGACGTTTA ACAAAGACG AGATCCGACC AGTCATTTGC
5751 ACGACCTTGC CTCAATCACC TCACCCTAAT TCCATCCCTG TTCCAATAA
5801 ACTTTATTTA CAAAAGCGGG CATATTATTT ACCTCATGAG CTGTAGATTA
5851 TTGATTTAAT TTTTTAAAA ATATTGCATT AATGTTATTC ATTTTGATTA
5901 CTGAATTTTT TGAGACCTCA CCCACCCTG TTA CTGGCCC TGCCCTTTGA
5951 CGTTGCTGCA AATTGCCTAG AAGATAATCG TCATTCAAAG CAGCCCTATT
6001 CCTTGAGCTG TCTGGTTACC TAAATTCCGT TTCCACACTC ACAAACAGAA
6051 GTAATAGTTT TACTGCTTTG GATTGTTGAG AGGATCATCA GTGCATACAT
6101 ATTAATTTCT AGCAATCCCA GCACTTCGGG AGGCTAAGGC CGGCAGATTG
6151 CTGTAGCTCA AGAGTTTCGAA ACCAGCCTGC ATAGAAAACA TGCCAAAAACC
6201 CCGCCTCTAC AAAAAAAAAA AAATTAGCCG GGCCTCGCCT GTGGTCCAG
6251 CTACTCGGTC CCAGCTACTC GGTGGCTGA GGTGAGAGAA TCCTTTGGGC
6301 CTGGGAGGTC AAGGCTGCAG TGAGCCATGA TCCTGCCACT GCACCTCCAGC
6351 CTAGGTGACA GAGTGAGACA CTGTATCAAA AAAAAAAAAA ATTTGTACCT
6401 TGCATTCAAA TCAATTTAAT AATTTTTTTT TTTTGTAGAC GGAGCTCCGC
6451 TCTGTTGCC AGACTGGAGT GCAGTGGCAC AATCTCGGCT CACTGCAACT
6501 TCTGTCTCCT GGATTCAAGC GATTCTCCTG CCCCAGCCTC CTGAGCAGCT
6551 GGGACTACAG GCACACCCA CCACGCCGAC CTAATTTTTG TATTTTTAGT
6601 AGATACGGGG TTTTACTGTA TTGGCCAGGC TAGTCTCGAA C'CCTGACCT
6651 TGTGATCCAC CCACCTCGGC CTCCCAAAGT GCTGGGATTA CCGGGTGAG
6701 CCACCATGCC TGACCAATTT AATAATTTTT TGAGAAACCA CTCAGCTGAG
6751 GCCTTGTCGC CTGTATCATT ACTGATGTTT ATATTTCTCC CTTTATTAAT
6801 AAGTTGATTC AGAGCCCTGA GAACACTAAG GAGGTAGACT TGGCATCTAG
6851 GGTTAGCTTT AAGGTCACCT ACTGATCAAG TCACCTAACA CACCCCTCCT
6901 CCTTAGGTTT TTATTTGCGA CTTTTTAAAC TGCTCTATT TTAGAAATTTT
6951 AAACCTATAC AACCGTAGAA AGGATGGTAT AATGAACCCA TCACCTTACT
7001 TCAACTACAG TTTGAATATC TCTCGTCTGA AATGCTTGGC ACCAGAAGCG
7051 TTTTGAATTT CAGATTCATT TTGGATTTTG GAATATTCGC ATACACATAA
7101 TGAGATATCT TGGGGGAGGG ACCCAAGTCT AAACATGAAA TTCAGTTATA
7151 TTTTATATAT ACCTTACACA CATAGTCTGA AGGTAATTTT ATCAGCATT
7201 TTTAAATAAT TTCGTGCATG AAGCAAAGGT TTTACTGCGC GCATCATAT
7251 GAGGTCAGGT GTGGAATTTT CATCTAGTGG CATCATGTCA GTGCTCAAT
7301 ATTTTGGAAAT TGGGAGCATT TCAGATTTTC AGGTTAGAGA TGTTCAACCT
7351 GTATTTTCAA GTCATGGCCA ATCTTGTTTT ATTCATACAG CACCCATTT
7401 TTCTCTCAC AGGATTATTT GGAAGAAAT CCAAGATATC ATATTATTG
7451 AACCACAAAG ATTTTAGTGT GCATATCTAA CAAACAAGAG CTTTCCAAAA
7501 ATAGATACTA CGATATTATT ACCACACCTA AGAAGTATCT AGTCAGTGTT
7551 CAGATTTCTT TGACTCAGAG ATATTTTATT TATTTTATA TGCCACTTTA
7601 GCATAAATTT TTACATTTTT AGTTTTTTGA ATCATCATCC GAAGTTGGCA
7651 TTTTGTAAAT GTTTATATTA TATATGTGTA TATATGCATA TATGTATGTA
7701 TTTTAAAGTA TACATACATA TATAAAGCAT ACATTTATGT ATATAGAAAT
7751 ATACAGGGCC GGTGTGGTG GCTTACGCTT GTAATTCGAG CATTTTGGGA
7801 GGCTGAGGCA GCGGATCAC CTGAGGTCAG AAGTTCGAGA CAGGCTGGC
7851 TAACATTGTG AAACCCCGTT TCTACAAAAA ATTAGCCGGG CATGGTGGCA
7901 CCGACCTGTA ATCCAGCTA CTCGGGAGGC TAGGCTGGA GAATCGCTTG
7951 AACCCAGGAG GCGGAGGTTG TAGGGAGCCA AGATCGTGCC ATTGCACTCC

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FIGURE 7C

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8001 AGCTTGGGCA ATAAGAGCGA AACTCCGTCT CAAAAAAGA AAAAAGGAAA
8051 TATACATATA GCCGGGCGTG GTGGCTCAGC TCTGTAATCC CACCACTTTG
8101 GGAGGCTGAG CGGGGCGGAT CACCTGAGGT CAGGAGTTGG AGACCAGCCT
8151 GACTAACATG GAGAAACCCC ATCTCTACTA AAAATACAAA ATTAGCCAGA
8201 CGTGGTGACA CATGCCTGTA ATCCCAGCTA CTCGGGAGGC TGAGGCAGGA
8251 GAATCGCTTG AACCTGGGAG GCAGAGGTTG CGGTGAGCCG AGATCGCGCC
8301 GTTGGCTGCC ATCCTGGGCG ACAACGGCAA AACTCCATCT CAAAAAAGA
8351 GAAATATACA CATAGCATAT AGAAATATAC ATACATATAT AAATATATAG
8401 AAATATACAT ACGTACACAC ATATATACAT TCACTTATGT GTTAACTTTC
8451 TTTATAGGTT TCCTCCCTC TCTTTTTTTT TTCTTTGCAA TATATTGTTA
8501 AAGAAACCGG CCGGGTGCAG TGGCTCATAC CTGTAATCCC AGCATTTTGG
8551 GAGGCCGAGG TGGGCGGATC ACCTGAGGTC AGGAGTTTGC AACCGGCCTG
8601 GCCAGCATGG TGAACCTTGG TCTCTATTAA AATAGAAAAA ATTAGCTGGG
8651 TGTGTTGATG TCGCCTGTGA ATCCCAGCTA CTCAGGAGGC TGAGGCAGGA
8701 GAATCGCTTG AACCCAGGAG GCAGAGGTTG CAGTGAGCCG AGATTGCACC
8751 ACTGCACTCC AGCCTGGGTG ACAGAGCGAG ATTCTATCTC AAAAAAAGA
8801 AAAAAAAGA GAGAGAGAGA GAAAGAAACC ACCCAGTTTG ACTTGTAGAA
8851 TTTCCACGT CTAGATTGCA TATCTGTGGT ATTATTCAAC ATGTTCCCTC
8901 ATTCCTCTTA TTTCCATATA CTGTCTAGTT AGATCTAGAG ACTTGATGGT
8951 ATTCAAATTT GATTGTTCTG TCAGGAATAC TTTATGGCTA GTATTGGGTA
9001 CTTCTATTAT GCAGCACATA ATGTCGTGGT GTTCTCTTTT TGGTGATGTT
9051 AGCAGCCATT AATGATAAAT GCCTAGGTC TTTATTTAAT TGAGGGTTGA
9101 TAAATTTGTT ATAATCTAAT TCTATCATTT ATTAATTCAT TAGGATATTT
9151 CTCTAAATAG AAACCTCCCC TCATCAATTG TATGGATATA TTGGGGAACA
9201 GTTCACACAG AAAAGGCATA ATAAATGCTT GATTCTTTTC ATTTTTTTTT
9251 TTACCGTTAC TAAAAGAGTT GGTTCGTGTA GCATCCCTCA AAGGTGAAAA
9301 ATGAACTTTT GTTTGTTTGT TGTCACAGTA TTCTAAATGT CATCCCTTCA
9351 AGGAACCAAT GTATTTGGTT CTTTCCCTAG TTCAGGTTGA TGATCCCACG
9401 ATGATTTGTG TGTCAATTAG TACTTGGAGC TTTCGGTCAC CTGCTGGTTG
9451 ATATAAAGTA TATGTTCATT TTCTAGGTTT ACCTAGAAAT CAATGACCCA
9501 AACGTCATTT CACAAGAGGA AGCAGATAGT CCTTCAGATA GTGGACAGGG
9551 CAGCTATGAA ACAATTGGAC CCTTGAGTGA AGGAGGTTTG TAATAGTACT
9601 TTTATTTTTA GGAATAGGTT GCGGGAGCCT CAGTTGTAAG TAGATTGGAT
9651 TGATTTCATT ATTCTCTTGA TTTATTACAT TATTAATGCC CGATCCTTAT
9701 TGTTTGTTTT ATTATAAAG CAAAATAACA GTGCTTGATC CTTTTGAAA
9751 CTATGTTTAA TTGTTGAATG TCTAATAGCT ACCATATTGC CTGGTTAATT
9801 GCATTTCATC TATAATAAAA GGAATTTTAA CACCTGCCGG AGGTTAGAAC
9851 AACTTTACAC ATTGTAATA TACGTAAAAT TACATTTCCT AGTAAGAGAC
9901 ATTTTTCCCA GGGAAAATGT TTTTCAAAAT GTATTTTTAG ATTTGCTTTG
9951 CTACAATCAG TTCTTAACAG TAGTCACGTA ATTTACAAT GTTATATATC
10001 ACTTGATATA AAATATATTT TTGAGGAGTA GTGGGACTAG GAGGAAGATC
10051 AATGATGGT ATAATTAAAA GAAAATGTTT TCCTCCAGAT TCAGATGAAG
10101 AGATATTTGT AAGTAAGAAG TTGAAAAACA GGAAGGTTCT ACAAGACAGT
10151 GATTCGAAAA CAGAGGACAC AAATGCCTCT CCAGAGAAAA CTACCTATGA
10201 CAGTGCCGAG GAGGAAAATA AAGAGAAATT ATATGCTGGG AAAAATACAA
10251 AAATCAAAAG GATTACAAA ACTGTGGCAG ACAGTGATGA AAGTTACATG
10301 GAAAAGTCTT TGTATCAGGA AAATCTTGAA AGCCAAGTGA AACCTTGCTT
10351 AGAGCTGAGT CTTCACTCTG GAAACTCTAC AGACTTTACC ACTGACAGAA
10401 AGAGTTCCAA AAAGCACATA CATGATAAAG AAGGAAGTGC AGGAAAAGCA
10451 AAAGTAAAAA CAAAAGAAAG ACTTGAGAAA GAGGAGAGAA AAATGAAAAA
10501 AATTAGACAG CTAATAAAGA AGGAAACAAA AAACCAGGTA CATTTTAAAG
10551 AATAATTTGC TATTGCTTGG TAGGTTTAAC ATTTTAGAAA AGGTTGCTGT
10601 TAGTACTTGA GGTGTTTTCT GCTCTCTGAC TATTGCTTTG AATTGACTAT
10651 TTTGTGTTGA GAATTATCT CAATAGGTAT GTGATTTAAA ACTAAGTGGT

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FIGURE 7D

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10701 CTTGGCCAGG TGCAGTGGTG CATACGTCTA ATCCCAGCAC TTTGGGAGGC
10751 TGAGGCCAGA GGGTCACCTA AGCCCAGGAG TTCGAGAACA GCCTAGGCCAA
10801 CAGAGTGAGA TCCCATCTCT ACAAAAAATT TAAAAATTAG TTGGGTGTGG
10851 TGGCCGTAGT CCCAGCTGTA GTCCCAACTA CTTGGGAGGG TGAGGTGGGA
10901 GAATCACCTG AGCCCAGGAA GTCGAGGCTG CAATGAAGCT GTAATTGTAC
10951 CACTGCATTC CAGCCTGGAT GACAGAGTGA GACCCGTGCT CAAAAAATAA
11001 AAAAACAAAA ACCAAAAAAA CAAAACCTAT TGGTCTTATT CTATTTTGGG
11051 TATGCAGAGG ACATTTCCAA ATAAATGGGT TTCTGATTTT CTTTATGAGC
11101 ACATGGAGTA ATTCTTTGCT GTCTCTGAGC TGATGAAAAA TAACTGAAAG
11151 AAGGCTTTTT TATGCATCTA TCAGTCAGTA GTCTTGTTTG CTAAC TAGAA
11201 AAACCATCCT CAAATTTATA AACTAGTTGC TTAACAAGTA TTTTACTFCA
11251 AAAAAAATTT TACTGTTTAT TAAGTTAGTT TTAGACAGTT GCATAAAATC
11301 ACAACTTGGG CTTCAAAGGA TACATGTGAG TTAGAAACCA GTAAGAATGT
11351 TCTAGATTTT ATATGCTTGT CTGTTGATGA AACATGGGCT TTTTCTGGCC
11401 TGTATCCAAAT TGCCATATGA TGTGTGTAAG TACTGGATTT TTAATGATT
11451 GGATTATGCT TTTTGTATTAT GTATTACTTA GGAAGATGAT GTAGAACAGC
11501 CATTTAATGA CAGTGGCTGT CTCTTGTGG ATAAAGACCT TTTTGAACCT
11551 GGGTTGGAGG ATGAAAATAA CTCCTCATTG GAAGATGAAG AGTCATTAGA
11601 ATCAATAAGA GCAGCTGTAA AAAACAAAGT AAAAAGACAC AAGCAAGTA
11651 AAGCATGATT GCAATAAGAG TTAATCAACT GCTTCTGACC TTTGCTATAT
11701 TTTTAAATTTA CTGTTGGAAC CTTAATTTTT TTTTAACTG AAGAAAAACT
11751 TGTGTCAGTT GACTTAAGTG TTTTCTGCTG TAATTTTGGG GACTTGCAGT
11801 ACAAGTGATA GACATGCTAA CTCTTTTGGG AACTAGTGTT TTGTTATTAC
11851 CCTTTTAGGA ATGCTGAAAA AAAAAACCAC TAAGATATTT GATGGTGTAG
11901 TAAAGATGCAG GTAAATAATA GGGGAAGAGT GTAAATTTTG CAATCCTATA
11951 GCCTTTGAGA AATGAACCCCT ATAGGGTTTC AGGAAGGTA TCAAGAGAG
12001 GCATCAGTCA AAACATTGTT GTCCCAGTGT TTTGGAAGCA TAATTTTCTT
12051 TCCTAAGATT TTTTTTTAGC TTCTGCGGAG TTATTTATCC CTCTTTAGGA
12101 AAGATGTAAG CAGAGGTAAA AGAAATAAGG GTCCAGACTC CATCTGAGGT
12151 ATCTGTTTTT TAAGCATAAT AGGATGCTGT GTGTTTAATA ATTTCTAGTT
12201 GATGATTATT GATTTATTAA TGTAGCATGA TGTGGTGTG GATTACAAAA
12251 GTAGTCTTCA GCTAAAGCAT CCTCTTATTT GAATTTCTGT TTTGTCTTAA
12301 TCAACCTGCC ATTTCTTTTA GAAAAAGAA CCATCTTTGG AGAGTGGGGT
12351 CCATTCATTT GAGGAAGGAA GTGAGTTATC AAAAGGAACC ACGAGGAAGG
12401 TGAGGTAGAG CCTGTATAT TAGTCACACT GATCTCTTTA CACAGGAGAT
12451 TATAGATTTT TTAGGGATAA ATATTTTATT TTGTCATACA TATTTTCTGT
12501 TTACCCATCA TATTGCTTTG TACATAGTAG GAACAAATA TGGATTGGAT
12551 TGAACAAATT CTCTGAGACT TGGGAATAAA TGAATTCCTT GAGTTTATAC
12601 TGCATTTGGG CTTACTCATG CTTACTATTT CCTTTCTCTT TTTCTGGAG
12651 AGAGCAAACT CTTGAGTGAT GAATATCTAT CTTTCTGGAT ATTCATATAA
12701 TTAATGTAGT CTCACTTCTT GTTTTCTTTA AGGAAGAAAA GGCAGCCAGA
12751 TTAAGTAAAG AAGCATTAAG ACAACTGCAT AGTGAGACTC AGCGCCTTAT
12801 TCGAGGTAAT GCAACCCAGT AAACCTTGAG GCAAAATCAC AACATTTCTT
12851 TGTAAAGTCA ACTTGGATGT TGGGGACTTT TATTTTCTTA ACATCTCTAA
12901 TGTGAACCTCA GGTATATAA TTAAGTTTAG AATTGATCTT GGTGAAGAGC
12951 CATGTTCTA AAGCCCTTGG AACATTAGTA TAACTGAAG AAATTTTCTG
13001 AACTGTAGTG CAGGTAAGGA GGAATTTTGT TAATGGTTGT CTATGGAGTG
13051 ATTGTGTCAG GATTCCTTTG AGAGGTAGTA ATCCCTCCCT ATTTGCAGTT
13101 TTGTTTACCT GTGTCAGCCA TGGTCCATGG AACTTAAAAA TATCATCCCT
13151 TGTCCAGAGT TATCACGCTG TATACATTAC CTGCTGTGTA GTCCGTTAGT
13201 AGCCCTCTCA GTTATCAGAT CAAAAAACA CTGCATGGTT TAGTACCATC
13251 TGCAGTTTCA GGCATCCACT GCAGGTCTTG GAATGTGTCT TCTGGATAA
13301 GCGGGGACTA CTGTATATA ATGTTTAGGT CCCACAGAGA GTCTGATTCA
13351 GTAGATTCGA AATGGGATCC AAGAATCTGT ATTTCTAAAA AACTTCTGGG

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FIGURE 7E

13401 ATCATTTTGA TTTCACATCT AGGTTTAAAA GCCACTGGTC TTCAGGAGC
13451 TTTTGTGTAC TTAGCTCCTC TGCCTTTGTT AAAGGGGAGT TTTCTATTTC
13501 TAGTGATGGC TTTGGTTAT ATGTTTAGTT AACTGAATAT GAAGTGACAT
13551 TTCAGAAATAT ACAGATATATA TATTGCTTG TTTTATTCCA TTTTATAGAG
13601 TCTGCACTGA ACCTTCCATA TCATATGCCT GAGAATAAAA CCATTTCATGA
13651 TTTCTTCAAA CGTAAACCCC GGCCCACTTG CCACGGAAAT GCCATGGCAC
13701 TATTGAAGTA AGAACCCTCT TTCCTTATTA TAATTTTCAT GAACATTTAG
13751 TTTTGTAGCA AACATCTGGC ATAAAAAGTT CAGATTTCTC ACTCCCTTAA
13801 AACTGATTTA ACTGATATAT ACTAAGGGAT GAGAATGTTT CACATTTAGG
13851 ATAATTTTCA ACTCCAGCTC AATTTCTCTT CTCTAGGTCA TCTAAATATC
13901 AGTCAAGCCA TCACAAAGAA ATCATAGACA CTGCAAAATC TACTGAAATG
13951 AACAGTGATC ACCATAGTAA AGGTTCTGAG CAGACAACAG GTGCAGAAAA
14001 TGAAGTGGAA ACTAATGCAC TCCCTGTAGT TTCAAAGGAA ACCCAGATCA
14051 TTACTGGATC AGATGAGTCT TGCAGGAAGG ATTTGGTAAA AAATGAAGAG
14101 CTAGAAATTC AGGAGAAACA GAAGCAGAGT GACATTAGAC TTCCACCTGG
14151 GGACAGCTCA GTTTGCAAC AGGAATCCAA CTTCCTCGGG AACATCACA
14201 GTGAGGAATG TCAGGTTGGA GGGCTTGTAG CATTTGAACC TCATGCCCTG
14251 GAGGGTGAAG GCCCCCAAAA TCCAGAAGAA ACAGATGAGA AAGTGGAAAG
14301 GCCTGAGCAG CAAAATAAAT CATCAGCAGT TGGGCCACCT GAAAAAGTGA
14351 GACGCTTAC TCTGGATAGA CTTAAGCAAC TGGAGTAGA TGTTCCTATT
14401 AAACCCAGGC TAGGTGCTGA TGAAGATTCC TTTGTGATAC TTGAACCTGA
14451 AACCACAGCA GGTAACTCCT TACATTGTGG GGAGCCTCCC TGGAGTGATT
14501 ATCCTGGTAG CTTTGTATTA TTGACTACTG TCGAGGACAG AGAACACAGG
14551 AGGAACCAAT AACCACTTTC ATCTTATCCT GCAGTTGTTT CAGATATGGG
14601 CAGAGTCTTT TTTAGAGAAA TTTGGCAGGG TATCAGAATG ATCTAAGCCA
14651 TGTTTTAAAT GGAAGTCTGT TGGCTGGGTG CGGTGGCTTA CGCTGTAAAT
14701 CCCAGCATT TGGGAGGCCA AGGCGGGCAG ATCAGCAGGT CAGGAGTTTG
14751 AGACTAGCCT GGCCAATACA GTGAAACCCC GTCTGTACTA AAAATACAAA
14801 AATTAGCCGG GCATGGTGGC ACGCATCTGT AGTCCTAGCT ACTCGGGAGG
14851 CTGGGGCAGG AGAATTACTT GAACCCAGAA GGCAGAGGTT GCAGTGAGCC
14901 GAGACTGCAC CATTGCACCT CAGCCTGGGT GAGAGAGCGA GACTCTGTCT
14951 CAAAAAATAA AAAAAAATAA AAAGGTTGTT GATAGTTAAT ATAAAAAGA
15001 GGTACATTGC TACTGTGTTA TGGTATTTAG GAATTTATTA TTTCTGCCTT
15051 TCCAATCTGA AATTAAGTTT TTTCTGTAAT CTGAGTCAA ATCTTAAGAC
15101 ATTGATGAAA ACATCATTTA GTTTTTTACT GCTAAGAGA AACATTTTGG
15151 TTCACTTAAA TTATCTGTGA AACCGAATTT CTTTGTGTTT CACTCATTTA
15201 ACAAAATATTA AAGTATCTAC TATGAGTAAG TTGCTGTGGG GCATACCAAG
15251 ATAAATCTGA CATTTAAGGT ATACTTAAGA TGCTTTTACT CTAATGGGGC
15301 AGATAAGAAG TATGCAATAA AGAAGTACAA AGGAGAAAT GGTAAATGAT
15351 GTCTTTGATA ATGAATATGT CATTGATAAT TGGAAATATA ATAACATGAA
15401 GAAAAAGGAA AAGTATTTTC TTAAGAAACA TTTAGAATAA AGTACTGTGG
15451 GAATTCAGAG AAGCATAAAT TTCTTCCAAAT GAATAGTTAA AAGACAGCCT
15501 GAAGAATAGG TGGATTAATT ACTTGTTTAC TGCCTTCCCT TTATCTGTG
15551 AGTTGGTATC TTCTGCCTTG TTCCTTACTC TATCCCTAGT GCTTCCCTCAG
15601 TGGACGACAC ATTGTAGGCA CTTGTATTTA TCAAAATGAAT GAATGATCCC
15651 TCAACACTGA ACTCAAGTAT TACCACATTG AATAAATTTT CTGACTCTTA
15701 GATAGAGCTG GATGCTCCCC ACTCTGCCTT GAGGCAGTAT GGAATGGTGG
15751 TTAAGAGCTT AGACTTTGTA GCAAGACCAAG GATTTGAATC TGAACATGCA
15801 TAGTAATGTG TTAACATTGT ATACGCCATT TGACCTCTTC AAGCATCTTT
15851 TGTTTAAAAA AGAGAAGAAA GCCAGACACA GTGGGTGCACA CCTGTAGTTT
15901 CAGCTACTCG GGAGGCTGAG GCACAAGAGG GTCACTTGAA CCCAGGAGTT
15951 TAAGGCCATC CTGGGCAGCA TATGAAATCC GTCTCAAAA AAAAAAATAA
16001 AGAAAAAGAA AAAAGCACTA TATGACTTGT GGGCTATGGT GAAGATTTGT

FIGURE 7F


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16051 TGAAATAATG CATGCAAATG GATAGTATAA ACAAGCACTC AAAAAGTTGT
16101 TGCTGCTTCT ACTATTATTA GTGAAATGGT TCACATCAAG ACTTTTTTTT
16151 TTTGAGACGG GCTTTCACTT GCTCTTGCCA CCTAGGCTGG AGTGCAATGC
16201 TGGCATCTCG GCTCACTGCA ACCTCCGCGT CTTGGGTTCA AGCAATTCCT
16251 CTGCCTCAGG CTCTCAAGTA GCTGGGATTA CAGGTACCCG CCACCACACC
16301 CAGCTAATTT TTGTATTTTT AGTAGAGACA GGGTTTCACC ATGTTGGCCA
16351 GGCTGGTCTC AAACCTCCTGA CCTTAGGTGA TCTGCCTGCC TCAGCCTCCC
16401 AAAGTGCTGG GATTACAGGT GTGAGCCACT ACACTCAGCC AAGACTCTTT
16451 CATTAAACCA AGCATAGTCA GTGGCTTATG CCTGTAATTC TAGCACTTTA
16501 GGAGGCTGAG GTGGGAGGAT TGCTTGAGCC CAGGAGGTCA AAGCTGCAGT
16551 GAGTTGTGAG CTGAAATTGC ACTCCTGCAC TCCAGTCTGG GAGACAGAAC
16601 GAGACCTGT CTCATAAAAA AAAAAAAAC ACAAAAAAT TATCTTTCAT
16651 TAAACATCTT ATTGTTGGCA GGTGCTATGT CAGTGACTAT ATCTGGTGTG
16701 TAAATATATG TCAGTGAGTC TGTTAATTGA ATGGGTTGAC TTTGGAGATG
16751 GAGAGGATAG AAAGAGCACC TTGTCTCATT AAAACAAAAA GAAAAACAAA
16801 ACACACACAA AAAAGATTCT GTTTCATTAA ACAGCTTATT GTTGGCAAGT
16851 GCTATGTCAG CCACTGTATC TGGTGTGTAA AATATGCTTA GTGAGTCTGA
16901 TAATTGAATG GGTGACTTT GGAGATGGAG AGAAGGACAG AAAGAACTCT
16951 GCATGTGTGT GCGTATGGG AAGATGTGAA AGTCACTTTG ACCAGGGCTG
17001 GAGGTTCAGG TGGCAGAGTT GTATAACAGA ACTAGCATAG CTCCTATTAGC
17051 AAAGAAGCAT GAGAATAAGC TGTGTCCGG AACACTGAGG GAAAGTTTTT
17101 GTTATATGGG ACTAAAAGTT ACCTAAACAG TCCTAGACTG ATAGGAAAGG
17151 GAGAAACATT TTTTGAGTAC CAACTATATT AGACACTGGT ACATTCTTTT
17201 TTAGTTGTCT TTCTTAATTC TCACAGTGCC AGGTATTATT TTGCAAAATG
17251 AAGAGACTGA GGCTCAGAGA GGTTAGGTAA TTTTTCACAG ATTATACTTG
17301 GCTTATAAAG GGACCTACAC AGTGGCTGGC ATATAATGAG CACTTATTTT
17351 TTAACTTGGA ACATGTTTTT CTTTAGAAAT AATTGACACG AAATTGGGGT
17401 TTCAGACCA GCCATAATAT ACATGAAGTT AGAATCAACA TTCATTCATT
17451 CATTCAATGCA ATAAACTTTT ATTTAGCACT GTGTTGGGTG CTGTGTATAC
17501 ACGTAAACAA CTCCTGCTC TCAAAGAAAT TGAAGTGTA TAGGAGTGAT
17551 AGACAGGCAA ACAGACCATT ACAA TACTGG ATGGTAAGTG CTGCGATCAA
17601 GGTATATAAT TGAGGGTGCA TTGGGAACCT AGAGGAAGGG TACCTTACTT
17651 GGAGCCTAGA AGTCAGGGAA GTTCTGTAAG TGAGCTCAGT AGAGATACCA
17701 AGGCAGAGAG GTGAGGGAGG GCTTTTTTGG TGGAGGGGTT GGACCTGCAG
17751 ATGTCAGAGA CAATGGAAAG CACAGGGTGA TCTCCCTGGC TGAAGTGAAG
17801 ATAGCAAGGA CATTGGTGAT CAGAGCCGAC ATCATTACAG GTTTTTATGC
17851 CATGCTAGGA GCTTGGACTT TAGCTCTTGG TAAGTAGAGG ACCACTGAAA
17901 GGTTTTCAGC AAAGGAAATG TTCAATCAGA TACTCACTTT AGGAAGTTAA
17951 ATCTGGTAGC TGTGTGGTG GATGCATTGG AAGGGTTTAA GAGTAAAAAC
18001 AGTGGGAACA GCTCAGTTTC TTTACCTCAT ATAGAATAAG GTTTCATGA
18051 GAAAAATGCAT GTAAATTTTAA ATTTTGTGAT GTCAGAAATA CATTTATTCT
18101 GTTGCTTGCA ATAGCATATG GAATAATCCC TGCTCTTAAT TCCTCTACTT
18151 TCTGGACAAG AGCAATGTGA ATGAGAACAG TTCTTATGCT GCTGATAGAG
18201 ATAAGCTAGG AAAGAGACTT TTCACTTAAG AGAGGAGATG AGAGGTGATG
18251 GAGGATGAGA GGTGATGGAC TAATAGAGAT GAATGGAGGT AGAGGAACCT
18301 GAACAGGGGT TTAGGATGA AGACAGTGAT GGTGTCATCA TGTAATAAAG
18351 GCCAAAGAAA GTGGTTGCTC CAATGGGTTG GGGGAGGAAG AGCTTTGAGG
18401 ATCCTAGCTT TCTCCAGTTA TGAATGAAGA TACCTCTTGC CTGACTACTA
18451 TTTTAAAGTCC CAGGTAATCT TCCCACCCAA CCATTCTCTP TACCCTAGTG
18501 GCACCATATA TAACCTGCCT ATTTCTGTTC CTTTTCCTCT GCTACCACCT
18551 GTTGCTTTCA GCTTTACTGA ACCACTGCAA AATAGGAGGC AGACTTACAG
18601 CTTGCTCTCT TACTCTTTTG TTTGCAATGT AAACATACCA TCCTTTAGAG
18651 TTGGGTTTTT GCTGCTAATA ATGTTGGGGT TTCAGGATAA AAAGATTTC
18701 TTCATTTTTT TCTTTTTCTA GTAAAGCCGT CTAGAGGAAA AAAACACATC

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FIGURE 7G

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18751 TAGATGCTAG TCACAAAAAC ACCGAAGTAT GATTIGAGTG CATTTTAGAA
18801 AATTAGTCAA GTTTCATGCC TATAGTCCCA GCACTTTGGG AGACTAAGGT
18851 GGGAAAGTTCG CTTTGGAGGCC AGGTGTTTGA GACCAGCTTG GGCACACATAG
18901 CGAGTTTCTGT TCTTTACAAA AAATAACAAA GCCAGATGTG GTGACATGCA
18951 CCTGTAGTCC TAGCTACTTG GGAGGGTGAG GTAGAGGAA TGCTTAAACC
19001 CAGGAGGTCA AGGTTGCAGT GAGCTGTGAT CGCACCAGCTG CACTCCAGCC
19051 TGAGCAACAG AGCAAGACCC TGTCTCTAAA AAGACAAATG AAAAGTGGCT
19101 GGGCACAATG GCTCACACCT GTAACCCTAG CACTTTGGGA GGCTGAGGAG
19151 GGTGGATCAT TTCAGTCCAG GAGTTCAAGA CCAGCCTGGA CAACATGGCA
19201 AAACCGGTCT CTACAAAAAA TACAAAAATC GGCCAGTCGC AGTGGCTCAC
19251 TCCTGTAAATC TCAGCACTTT GGGAGGCCGA GGTGGGTGGA TCATCTGAGA
19301 TCAGGAGTTC AAGACCAGCC TGGCCAACAT GGTGAAACCC CATCTCTACT
19351 AAAAATAAAA ATAAAAAAAT TAGCTGGGTG TGGTGACGCA TGCCTGTAAT
19401 CCCAGCTTCT AGGGAGGCTG AGGCAGGAGA ATTGCTTGAA CCCAGGAGGT
19451 GGAGGTTACA GTGAGCCGAG ATCATGCCAC TGCACTTTGG CTGGGCAAC
19501 AGAGTGAGAC TCCGTCTCAA AAAAAAAAAA AAAAAATTAG CTGATATGG
19551 TGGTACATGC CTATAGTCCT GGCTATCTCA GGAGGCTGAG GTGAGAGGAT
19601 CACCTCTAAG CTTGGGGAGA TTGAGGCTAC AGTGAGAGCC AAGATTGCAC
19651 CACTGCACTC CAGCCTGGGC GACAAGCGA GACTCCATTT AAAAATAAAC
19701 CATTTTATCA TGGACGAGAA GGCCGCCTGA AAATATCCAG TGTGCATCAA
19751 CTCCAAAGGA ACTTTCTCCT TAAAACTGCC AGCTCTCATC ACAGATTCCA
19801 TTATGATATG AAGTGTTAAG CAGAGTGAGT AGGGATTGGT TCCAGGTAAAC
19851 AGCTAGCTGA GGGAGAAGGA AATTCTAAGA TATTGCAGTG GGAAGAGGG
19901 GTAAGTTTAT ATCACTATTG GATTGCTGAA CTTACTGTTC CCAGTATATA
19951 TATATTTCCG TTTGTATACA AGTTGAGCAT GTGGTACTGG GGCCTGCAGTA
20001 TTTTCTTTCT CATTGTACCA ATTGTACTAG TGTAAACAGT TTACACAAAA
20051 AACTTTTTCAC AGTCTGTCTG CTAGTTTATA TCACGTAGCT GATTGTCAAT
20101 TTTATTTCCC TTCTTGAAAA AAATTGACTT TGCCATATAT TAGTAAGATT
20151 GCCAATAATG AAACATTCAA AATAGGGAAT TTGATCCGAC CACTTTGGGA
20201 GGCCAAAGGTG GGCTGATCAT TTGAGGTCAG GAGTTCGAGA CCAGCCTGGC
20251 TAACATGGTG AAACCTGTCT TCTACTAAAA ATACAAAAAA ATTAGCTGGG
20301 CATGGTGGTG CTCACCTGTA ACCTCAGCTA CTCAGGAGAC TGAGGCAGGA
20351 GAATCGCTTG AACCCCTGGAG ATGGAGGTTG CAGTGAGCTG AGATCACATC
20401 ACTGCACTCC AGCCTGGGCA ATAGAGTGAG ACTGCATCTC AAAACAAAAA
20451 CAAAAAACAG CAATAACAAA TAGGGAATTT TAAAGGAGA CCAAAACCCA
20501 TGAAAAATTA AGCCCTTGAA TAGATGAGAT TATAATCTTT TTTCTACCA
20551 GTTTAATACT TTTAAAGAAT TTTTAAAGAA TGTTCAAAG AATTGCACAT
20601 ATTTAGAAAT TTCAGGTATA AATTTCTGTC TGATTTTTTA AAGTCTGATT
20651 TTTGAAACGT TGAGGAAGAA CAGTTGTGGC AGTCAATTAG TTTGGGTTAA
20701 GTTGATGAA TTTGACTCAG GAGTTAGTAG CAAGGGGTTT TTGGTTTCTC
20751 TGTGTATGTG TGGTTTCCCT CATAATTGTT GAGCTAAAAA AAACCTAGCT
20801 TATAAGTCTT AAGGAAAGAA GTTTTGAGCA TGGCAAAC TGCACTGGT
20851 TGGCGTTTGG GTTTAGAACT GGAAGCCTTG AAGCAGCGTT TCTGGAAGCA
20901 TGCTAATCCA GCAGCCAAAC CCAGGGCTGG TCAGACAGTG AATGTGAACG
20951 TCATAGTGAA AGACATGGGC ACTGATGGAA AGGAAGAGCT AAAAGCAGAT
21001 GTGGTACCTG TGACTTTAGC ACCTAAGAAG TTGGATGGAG CAAGCCACAC
21051 AAAACAGGT ATTIGAGCCC ACAGGTTTGT TTTTGTGCTT TTTGCTTTGT
21101 ATTTCAACAG ATCTTCAAGG CTATTGAAAA CCTTATAAGT AAAAGTTATA
21151 GAATCTTTTT CCTTGGAGGC TTTGCAGAGC AGTATCTCTG GCATGATTCA
21201 CGTGTAGCAC ACCTAGAGGT GTGGGGTGGA CAAGCTGGCT TATTATTTTT
21251 TTTAGATATC ATTTGTCTTA TTATAAAAAA CCCCATTATA GACAAATATA
21301 TAGAATAAAT GAAAAACTTA ATCTTCTATC AGAGACAGGT TCTATAACCA
21351 TATCGTGTAT CCTTTTAAAC TCCTTCTCTT GCACATATGT ATATGTAAT
21401 TAAACAAAAA CAGGCTGGGT GCAGTGGCAC ATGCCTGTAA TCCTAGCACT

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FIGURE 7H

21451 TTGGAAGGAC AAGGCAGGAG GATCTGTTGA GCTCAGGAGT TGGAGACCAG
 21501 CCTGGGCAAC ATAGTGAGCC CTCATCTCTA CCAAAAAAAA AAAATTATCC
 21551 AGGCATGGTG GCCTGCACCT GTGGCCCCAG ATACTTGGGA GGCTGAGACA
 21601 GGAGGATCAT TTGAGCCAGG AGGTTGAGGT TGTAAATGAGT CATGATTGTG
 21651 GCACTGCACT CCAGCCTAGG CGAGAGAGTG AGACCCGTGC TCAAAACAAA
 21701 AAACCCAAAA CAAAACAACC CACCTATAAT GTGATCATAA CATGCATTCT
 21751 GCTTTGTGTT TTAGAAATGT ATTAAGGACA GCTCTCACCC CTCCTTGAA
 21801 ATCACAAGTA ATATATCACA TGGAAACAG TTTTAAACAC TGA AAAAAGG
 21851 TATCAATGA AAAACTAGTC TTCCCAAAGA TAACATTAA CAATTTCTTG
 21901 TATGTCCTTA TAGGAGTATT TTTATCCATA TACCGTATTT TGTGAATGTG
 21951 TGTGACATTG AACATTACT CCCTGTCAGG CATTGCTCTA GGTGCTTTAT
 22001 ATGTTTTATC TCATTTAATC CTTACAACCC TATGAGGTAA ATAACATTAG
 22051 TATCCTTATT TTGTATATGA AGAAACTGAT ATGCAGAGCA CTTAAGACAC
 22101 TTGCTCAAGT TTACACAGCT AATAAATGGT AGGACCAGTA GTCTAAATCCA
 22151 GACCACCTAA CTCCAGAGCT CAGATCTACT TTATATTGCT TTTGAGGCTT
 22201 TTTTTTTTTT TTTTTTTTTT CCTCTAAGAC AGAGTCCTGC ACTGTCACCC
 22251 TGGCTGGAGT GCAATGGCAC GATCTTAGCT CACTGCAACC TCTACCTCCT
 22301 GGGTTCAAGT GATTCTCCTG CCTCAGCCTC CCGAATAGCT GGGATTACAG
 22351 GTGCCTGCCA CCATGCCTGG CTAATTTTTG TATTTTTAGT AGAGATGAAG
 22401 TTTCCGTATG TTGGCCAGGC TGGTCTCGAA CTCCTGACCT CGTGATCTGC
 22451 CCACCTTGGC CCGCAAAAGT GCTGGGATTA CAGGCGTGAG TCACTGCCGC
 22501 CGGCCTTGAG GCTTTTTTTA AAATGGCTGC ATAATATTCC ATTGAATGAA
 22551 TACAACATGA CTCATTAAAC CATACTCGTA TTGACAGATG TCTTGTTTGT
 22601 TCCAGTTGTT GCTATTGCAT ACAGTGTTAT ATTATAGTGC CAGATATATG
 22651 GTGGTATATT AGATGAAAAT TCCTTACAGT GGAATTGTCA TGATATATAT
 22701 CACATTTTGA TATATATCAT CCAGTTGTCT TTCAGAAATG TGTGACCACT
 22751 CTGAATCACA GTGTATGAGT TCCTGTTTCC TCTCAATAGG TATTATCAAA
 22801 CCTTCTAATT TTGGCCAGGC TAACATGTCG AAAATGTATC TCGTTATTTT
 22851 GATTTGTAGC TCCTCAATTA GAAGTGAGAT TAAGCATTAC TTTTAAATTTA
 22901 TTAACAATAT ATGTTTATTT TTCGTGAAC TCCAGTTTAT ATCATTAGCT
 22951 CATTTTACTC GAGTCGTTTC TCCTTTTCTT TAATATAGGT AAAATTATCA
 23001 ATGTTTTTCT TCATGGCTTT TGAGCCACAG ACTTGAAGCT CTACTGCCCTA
 23051 CCCACCTTTT CTCTCTTTTG AACAAATATT TTATAATCCC TGAGTAGTAT
 23101 ACTATCTAGG GTGCAGAAAT TCTCTTTGAT ACTTCAATTC ATAATAATAC
 23151 TCTTGTGTTT AAATAACAAA AAAGCCAGA ATACTAGAGT CTCAGATTTT
 23201 CCTTTTGGGA TGTGACTAGA ATATTCTTGG AGTTGCCTAA AATGCATACC
 23251 TAATTATTGT ATTATGTCTA AAGCATTTCT ACATATTTCT GTTCAGGTGA
 23301 AAAGCTTCAG GTGTTAAAG CTAACCTGCA AGAAGCAATG AAACCTCCGAA
 23351 GGGTTGAGGA CGGCCAGAAG CGCCAAGCAC TGTTTAAAT TGAATGAATGAA
 23401 GATGGGTTTG AGGAAGAGGA GGAGGAAGAG GAAGAAATGA CAGATGAGTC
 23451 TGAGGAAGAT GGAGAAGAGA AGGTAGAGAA AGAAGAGAAA GAGGAAGAAC
 23501 TAGAGGAAGA GGAGGAGAAA GAAGAGGAGG AGGAAGAAGA AGGAATCAG
 23551 GAGGTTTCTG GCAATTACGT TGTTTTGTTA CCTTGTCTATG GTGAATATGA
 23601 GAGAAAAAGT CAGACTTGAA AAAGAGTATA ATAAGCATGT TCAATTGTAT
 23651 AAGAGGTTTT AGGGGCATGA TGAGGGTAAC TACCTCATAT ATCCCTAAAT
 23701 CTTAGGAATC TCAGTTCTGT CAGTACCAC TGAATATCTGT AGATCATCAT
 23751 TATATATCTG AATACAGATA TTCAGTGGTA CTGACAGAAT ACCATTGCCT
 23801 GGGCTTCCAC CTGTTTATAT ATTTTAATAT AATAATGCTA ATATTAAAAA
 23851 TGGCTTTGTA TTCGTAGGAA ATTTTATCTT TGTTGTTTAT TTAGGTTTCT
 23901 CTAGCAGATT AAAAAGCAGT CCTAACCTTG GCTAGATTGA GGCTGGAGT
 23951 AAATCTCTAG GGAGGTAGAG GCCTTTCTGA GTTATTTTCG TTCTTTGTAG
 24001 AAGAGGCAT TTGTAGAAGG GCCTCTTGCC CTGTGTTCCG AGTACTGTTT
 24051 TCTGCCTAGG GAAAACAGGT GATGATACGA TGTGTTAAGTA TTA AAAAATC
 24101 TTCCTTTTTG GCGCGGCAG GGTGGCTCAT GCCTGTAATC CTAGCACTTT

FIGURE 71

24151 GGAAGGCTGA GGTAGGTGGA TCACCTGAGG TCAGGAGTTT GAGAACAGCC
24201 TAGCCAAACAT CGTGA AAAATC CATCTCTACT AAAATACAA AAATTAGCTG
24251 TGTGTGGTGG CACACACCTG TAATCCCAGC TACTCAGGCA GGAGAATTGC
24301 TTGAACCTGG GCAGTGAAGG TTGCAGTGAG CCAAGATTGT GCCACTATAC
24351 TCTAGCCTGA GCGACAGAGC AAGACTGCAT CTCAAAAAAA GAAAAA AAAA
24401 AAAAACTTTT CCTTTTGTG TGCTGGGATC ACTTTATTTT ATTTTATTTT
24451 ATTTATTTTAT TTTAAATTTT TTGAGATGAG GGTCTCAGTA TGTGTGACAG
24501 ACTGGTCTCG AACTCCTGGC CTCAGTGAT CCTCCATCG TGTGGCCTC
24551 CCAAGTGCT GGGATTACAG GCATGAGCCA CCATGCCAG CAACCTGAGT
24601 TATTATTTAA TTTTGGGTAA AGGAGAAAG AAGCAATGGC TGAGCTATAC
24651 AGCCTGTCTC AGTCTGTGCT TGGTTTGAGA TCAGTAGTCA GCCTGCAATC
24701 TTAGACTGAT TAATTAACCT CTACTGCCT CAATAAATG ATAATCCAGT
24751 CGTCTTTTAT AATCTTAGCA ATTTGCGGAG GGTAGAAGGT AAAAAA AAAA
24801 AATAGAAAAA AGTTCTAGAA GTGTCAGGGA AAATTATGTT GATAATGGTC
24851 ATATGGAAC TCTTCAAGT TTACCTTTTT GAATTTAAGA TGTGATCTGT
24901 AACCAATCAG CCATATTTCA GGCTACCACT GTATTTGTCT TTAATGTTT
24951 TGACTTGTAT TTTTGTGTTT GTGGTGGCCT GATTGGTAAA GACTGCAGAA
25001 TTCTTCTCTA GTAGTGAAGA AATAGAAACA AAAGATGAAA AAGAAATGGA
25051 TAAAGAAAAA AATGATGGCA GTAGTGAAT TGGCAAGGCA GTTGGCTTCC
25101 TCTCTGTCTC CAAGTCTCTC TCATCAGATT CTACTTTACT TCTGTTTAA
25151 GACAGCTCTT CCAAGATGGG GTAAGTGATT CTCTCTAAGA AACTTAAAA
25201 TTGCCCTTGA TTTGCCCTC CTGTAAAAAC TAGGAACAGA TACTGAAACA
25251 ATTTACTTTT TATTTTGTGA GTTACTTTCC TACTGAAGAA AATTCAGAAA
25301 CAGATGAAAA CTCAGGCAAG CAGCCTAGCA AACTGGGTAA GTATGTATTC
25351 TTGTGCAGAA CTTAACATTT CTTTGTGCCC TCAGCTTTGA TATTTAAGGA
25401 CTCGAGTACG GTAAGTTTCC ATGTTTTTAA ATCTGGTCACT TTCCCACTTT
25451 CATATGTAGC TATGAAAAAG GTTTATGAAT TAGAATATTT TTCTTGTGCT
25501 ATTTTTTGTGA GTTTATTTAT AGTAGACCAT GGTACATAAT GTCCCTAGTG
25551 AATGTGTGTT GATTGAGTGA GCAATGAAT GTTCTGTAT GTAGATCAAA
25601 GGAAGACGTA TAATTGATTG GACAATGAAG AGTGTGATCA TAGGCATTAG
25651 GAAGGATAAG AGAAAGAAGA GAACTTTCGG CCAGGCGCAG TGACTCAGC
25701 CTGTAATCCC AGCACTTTGG GAGGCTGAGG CAGGCGGATC ATGAGGTCAG
25751 GAGATCGAGA CCAGCCTGGC TAACATGGTG AAACCCCTGTC TCTACTAAAA
25801 ATATAAAAAA TTAGCCAGGT GTGGTGGCAC GCGCCTGTAG TCCAGCTAC
25851 TTGGGAGGGT GAGGCAGGAG AATCGCTTGA ACCTGGGAGG CGGAGGTTGC
25901 AGTGAGCCGA ATTCACGCCA CTACACTCCA GCTGGGGTGA CAGAGCGAGA
25951 CTGTCTCAAA AAAAAA AAAA AAGAACTTTC AAGTGTCACT
26001 TAGCTCAGAG TAATAAGCCC TGATTATATA ATGCTATCTT AGTACTGTAA
26051 TTTACCTTTA ACTTAATGTT TTGGAACATA TAACCTGAGG GGTGTGCCA
26101 TGAATTTTAT CTGACAGTTT CATCCTCAAC TCTTTTCTCT AAACAAATCC
26151 ACCTTATTTT TGTAATCATG TGCTTAAAG GTGTTTCTCT TCTTTAGAT
26201 GAGGATGATT CATGTTTCAT GCTAACAAAG GAGAGCAGCC ACAATAGCAG
26251 CTTTGAAGCTG ATTGGCTCCA CGATTCCATC CTATCAGCCT TGCACAGAC
26301 AAACAGGCCG TGGGACCAGT TTTTCCCTA CAGCAGGAGG ATTCAGATCT
26351 CCTTCCCTG GGCTATTTTC AGCCAGTTTG GTCAGCTCAG CTTCCTAAGT
26401 AAGATGGTAA TGGTTTTTCT AATCTCCTCC TCTCTTTGCT TCCACACTTG
26451 CTAATAAAG TTTGTCCCAG CCAACCAACT CCCACACGT TGGTACTGAG
26501 CTTATGTGTG TTCAGTTTAA AAAATCCACC CCCTTTGTGT ATTAAAAACA
26551 AGCTTCATCC AGTATTCTTA CTTTCTTGGA GGTATTTTCT TTTATGCTTC
26601 TCATGGCTGT GTATTGCTCC CCTCAACTAC AATTTCTGTA GAGTAGCTTA
26651 AATATTGCAA ATAGCAACTT TTGTTGTTGT TGTGATGATC AGTACATTT
26701 GTAAATGTT TTGTTATTGT TTGTTTTTGT TTGTTGTCCA GAGTTACGGG
26751 AAACCTGTCT AGCCTTCACT TCCCATAGAG GATTTCCAGG ATCTGTATAA
26801 CGCTCCCCA GAGCCTAAGA CACTTTTCCT AGGAGCAGAT GACTTCAGT
26851 TCTGTTTAGA AGATGACAT CAGAGCCAAC TGTGGATGTC AGATGGGTAG

FIGURE 7J

26901 GTAGTTTTGT GTTCTGTGG GCGGGAATGG TGCTGGGTAC TGCTTAATTT
26951 TGTTTAAAAA TAAGTGAGCT TCTGTCACCT CATCTGTGCT TTCTCTTCTG
27001 AGAAGAGAGAA GGTGTACAGA CCATTAGTAT TACATTCTAT AAGTTTGAAC
27051 AAAGTCTGTC CAGAAAATAA ACATAAATAG CTCTTGCTAA CATTCGTGTC
27101 CTTCAAATTC TGCTTATTT GAAATGCATA GATCTTGAT TGTAAAGTCA
27151 TCAAATTTCC CTGTATCCAT CCTGCTATGT TATTATTGTT GGGTAAGGTT
27201 GAGAATTCAC AGACTGGTGG CACATTACAG GACATAATGC CAAGCCCTGC
27251 TCTAGCATCA TCTGAAGCTA AAAGTTATCC TTTACACTTT ACCTTCTGAG
27301 TAACATTTTA TTCTTTCACA AAACTTTTC CTCCCTCTTT AGATTACAC
27351 AAGCCTAAAG TTTGAATCTT TTGCTTTCTG GTTTGAGATT CAGCTTTTAA
27401 CTGGTGTAGG AAATGAATTC AGAGGTTTTT CACCCCTAC TTTGCCATTT
27451 CTCTGAGGAA TTTTTTTTTT TTTTTTTTTT TGAGGCAGAG TCTTGCTCTG
27501 TCGCCACGGC TGGAGTGCAG TGGCGCGATC TCGGCTCACT GCAAGCTCCA
27551 CCTCTCTGGT TCACGCCCTT CTCCCTGCCT AGCCTGCCGA ATAGCTGGGA
27601 CTACAGGCGC CCACCCACAG GCCCGGCTAA TTTTTTGAT TTTTAGTAGA
27651 GACGGGGTTT CACCATGTTA GCCAGGATGG TCTTGATCTC CTGACCTCGT
27701 GATCCGCCCG CCTCGGCCCT CCGAAGTGCT GGGATTACAG CGCTGAGCTA
27751 CCGCACCOCG CCTCTCTGA GGAATTTTTT ACACATTTCT TTGTGCTCAT
27801 TGTTCTTAG GTTCTTAAAT GTTAGAAACC ACAGGAATCA GTACCAAGCT
27851 TTGAAGCCTC GATTGCCATT GGCCAGTATG GATGAGAAAT CCAATGGATG
27901 CAACATGGAT GAGCTGTTGG ATTTGTGTAC TGGAAAGTTC ACATCTCAGG
27951 CTGAAAACCA TCTACCCAGG AAGAGTGACA AGAAGAGAA CATGGAGGAA
28001 CTCTCTGAAC TTTGTTTCAGG AAAATTCAC TCTCAGGGTA AATATCCAAC
28051 CGAGAGTATC AAGCTTACCA CACCCAAGTA TCAGTGCCCT TGAAAGAAT
28101 TCCCTGGGCG GGTGGGGTGG CTACATGCCT TAATCCTAGA ACTTTGGGAG
28151 GCTAAGTTGG ATGGATCGCT TGAGCTCAGA AGTTTGGAGC CAGCCTGGGC
28201 AACATGGCAA ATCCCATCT TACGAAAAAA AAAAAAATA ATTAGCCAGG
28251 CATGGTGGCA CGTGCCTGTG GTCCTAGCTA CTTGGGAGGC TGAGGTGGGA
28301 GGATCTCTTG AGCCTGGGAG ATGAAGGTTG CAGTGAGCTG AGATCACACC
28351 AGTGCACTCC AGCCTGGGTG GCAGAGACCC TGCATAAAAA TAGAAAAAAA
28401 GAAAGAAAAG AAAGAAGCCC CTTACCCCTA GGTGAAAAAT TCACAGAAAA
28451 CAGGGCTGTG ATGGAATCTG TGTATAAACT GAATTCACCT CTTAGTGCCC
28501 TGATATTTAG AACTCTTACT TTCTTAGAGT GGTAAAGTAT CAACCTAAGA
28551 CTACTTTAGG CCGGGCGCAG TGGCTCACGC CTGTAATCCC AGCACTTTGG
28601 GAGGCCAAGG CGGGGGATTT CCTAGCTCA GGAGTTCGCC ACCAGCCTGG
28651 GCAGCAGCGT GAAACCCCGT CTCTACTAAA ATACAAAAAA TTATCTGGGC
28701 ATGGTGGCCC GTGCCGTGTA TCGCAGCTAC TTGGGAGGCT GAGACAGGAG
28751 AACTGCTTGA ACCCCGGAGG TGGAGGTTGC AGTGAGCCGA GATTGTGCCA
28801 CTGCACCTCA GCCTGGGCAA CAGAGAGAGA CTGTCTCAAA AAAAAAGTCT
28851 TGAAAAAATA AAAGACTGCT TTAGCTTTGC CCATATATCA TTTATGATTA
28901 ATGTATGTAC AAAGTTTAGA ACAGTGCTG ATGTATAATA AATTTCTAT
28951 AAATGTTAAT TTACTTCTG TTCCCTGCC CCAATACACA CAACCTGTAG
29001 ATCGAACATA AGCTCTATGA GACCTGGGAT AGTGGTTTGT TCATTACTGT
29051 ATCCCTGGTG GCCTGGCACA TATGGCACAT AGTAAGCACT AAATAAGGAT
29101 TTGTTGAATG AATAGATGGT AGGCTCTTCT TGGCAAGCTT ACCTTAGAAC
29151 TGTATCGAGC TGGCATGACT TTAGATGGCT GGGAAAAAG TATAAAGCTA
29201 TCATTCTCTG GTGACACATC TTTTCTTGT TGTGATGTAG ATGCCTCCAC
29251 TCCAGCCTCA TCAGAGTTAA ATAAACAGGA GAAGGAGAGC AGCATGGGTG
29301 ATCCAATGGA AGAAGCACTT GCTCTTTGCT CAGGCTCTTT TCCACAGAC
29351 AAGTAAGTCT CAGATTGCTG GGAATTTGGG AAGGCTCGGC CTTTGTATAA
29401 AATCAAAATA ACTGATCATC TTAAGGGCTT TGCACCTTTT CTGAGAATCT
29451 TGCAGTGGAT TTGAGTCTCA TATATGCCTA GTAAGCAAT TATAATGCTT
29501 TGGTGGAGAA CAGGGTAAAA AAGGCAAGAA TATGAAAGCT ATTTAATATC
29551 ATTAATAGAG AAATGCCAAT CAAACCATTA GTGAGACACC CATTAAGATG

FIGURE 7K

29601 ACTTTTATCA GAAAAACCCC AAGAGTGTGA GTGAGAATGT GGAGAAATTG
29651 GAAACCTTGT GTACTATTGG TGAGAATGTA AAATAGTGCA GCTGCCAGGG
29701 AAAGTATGAT GGCTCCTCAA AAATTAAGAA TAGAGGCCAG GCACGGTGGA
29751 TCATCTGAGG TCAGGAGTTC GAGACCAGCC TGACCAACAT GGTGAACCCC
29801 CGTCTCTACT AAATACAAAA AATTAGCTGG GCATGGTGGC GCATGCCTGT
29851 AATCCCAGCT ACTTGGGAGG CTGAGGCAGG AGAATTGCCT GAACCCGGGA
29901 GGCAGAGGTT GTAGTGAGCC GAGATCATGC CATTGCACTC CAACCTGGGC
29951 AACAGAACA AAACCTCGTC TCAAAATAAA TAAATAAAAA TAGAATGACC
30001 ATATGATCCA GCAATTTTAC TTCTTAGTCT GTACCCCAAA AAAGTGAAG
30051 CAGGACTTGA ACAGATATTT GCACCCCAT GTTCAAAAGCA GCATTATTCA
30101 CAGTAAGTAG TCAAAACATG AAAGCGACCT ATGTTTATTG GCAAAATGAAT
30151 GGGTAAACAA AATGCGGTAT ATATGCAAAG GAATATTCAA CTTAAATGAG
30201 AAATTTCTGGC TGGGCATGGT GGCTCACACG TGTAATCCCA ACACTTTGGG
30251 TGGCTGAGGT GGGCGCATCA CTTGAGCTCA GGAGTTTGAG ACCAGCCTGG
30301 ATAAATGGC AAAACCCCAT CCTATAAAAA AAAATACATAA AATTAGCTAG
30351 GCCTGTGCCG GCAGTACCAG CTATTGAGGG GGCTGAGGTG GGAGAAATTGC
30401 TTGAGCCTGG GAGGTCAATG CTGCATTGAG CCATGATTGT GCCACTGCAC
30451 TCTGGGCATC AGAGCAAGAC CCTGTCTCAA AAAAAAGAA GTTCTGACAC
30501 TTGCTACAAC ATGGATGAAC CTTAGAATGT TATGCTAAAA GAAATAAGCC
30551 AGTCACCAA AGACAATAC TGTATGAGTC CACTTACATG AGATACCTAG
30601 AGTAGTCAA TGCATAGAGA CAGAAGGTAG AATGGTGGTT GCCAGAGACT
30651 GAGGTTATAA GGAATGGAG AGTGTAATGG GTATAGAGTT TTAGTTTTGC
30701 AAGCTGAAAA GAGTTCTGGA GATTGCTTAA CAATATGAAT GTACTTAACA
30751 CTACAGAACT ATAGAAAGAT CGTTAAAAAG GCAAAATTTA TATTATGTGT
30801 ATTTTACCAC AATTGAAAA TTTAAAAAT TTCTTCCTGT TTTATTGAAG
30851 GATTATTGGT GATAATAAAA GTTTTAAAT TTGGCTGGGC AGGTGGCTCA
30901 TACCTATTAAT CCCAGTACTT TGGGAGCCCA AGGCCAAGCAG ATTGCTTGAA
30951 TCCAGAAAT CAAGATGAAC CTGGGCAACA TGGTGAATC TGCTCTACA
31001 AAAATACAAA AATTAGCTGA ACATGGTGGC TTGATCTCT AGTCCGACGT
31051 ACTCAGGAGG CTGATGTGGG AGGATCACTT GAGCCCTGGA GGTGGAGGTT
31101 ACAGTGAGCT GAGATGGTGC CACTGTATTC CAGGTGGTGT AAGAGACCAA
31151 GACTGTCTCA GAGAAAAAAA AAAAATTAAC ACACACAAAA TTTTTTTTAA
31201 TTCATAACTT GGCTGACTAC TTGTAGTTTG CTTTCAAGAA CTTATTTATT
31251 GATTCAATTGA TTTACATTTT AGGGAAGAGG AAGACGAGGA GGAGGAATTT
31301 GGAGACTTTC GGCTTGTTTC AAATGATAAT GAGTTTGATA GTGATGAGGT
31351 GAGTATGAAG GGAACAAAGT AATCATAACT GAGCTCCATG TATTGCTGCC
31401 CTCAGGTGTT TTTTCCCCT CAGTTCTTGA GAATTTCTAG TTTGGCATCT
31451 TATCAGAAAC AATTTCCCTAG AATGAGGTAT TTGGGCAGAT GTTTATAAAT
31501 CCTTTTTCAT TTGAGGACGC ATTTTATTCT GCTTAATTTG GATATGATGC
31551 TGATTTTGTA GGATGAACAC AGTGACTCTG GTAATGATCT GGCCTGGGAA
31601 GACCATGAAG ATGATGATGA AGAAGAACTC CTGAAGCGAT CTGAGAAGTT
31651 GAAAGAGCAA ATGTACGTGT TATTAATATG TCCATTCCCT CAGGTGTATT
31701 TAAAAATTTGG TCACTAGGCC AGGCATGGTG GCTTGCOCCT GTAATCCCAT
31751 CATTTTGGGA GGCTGAAGCA GGGCGATCAC CTGAGGTGAC GAGTTCAAGA
31801 CCAGCCTGGT CTTGGTGACA CAGGTCAAGA GATCGAGACC ATCCTGACAA
31851 ACATGGGTGAA ACCCTGTCTC TACTAAAAAA TATAAAAAAT AGCCAGATGT
31901 GATGACAGGT GCCTGTAGTC CCAGCTACTC AGGAAGCTGA GCGAGGGAGA
31951 ATCGCCTTGCA CCCAGGAGGT GGAGGTTGCA GTGAGCCGAG ATCGCACACC
32001 TGCATTTAGC CCTGGGTGAC AGAGCGAGAC TCTGTCTCAA AAAAAAATAA
32051 TAAAAAAGAG TTGATCACTT AAATGTCTCT GTGTGCTAAT AACTGTGCTT
32101 TACAGGCATT AACATATTAT CTTATGCCAG GCACAGTGGC TCACGCCTGT
32151 AATCCCAGCA CTTTGGGAGG CCAAGGCAGG CATATTACTT GAGGTGAGGA
32201 GTTTGAGACC AGCGTGACCA ACATGGTGAA ACCCTCTCTA CTAAAAATAC
32251 AAAATACAAA ATAAAAATCA AAAATTAGCC AGGCATGGTT CTGGCGCCT

FIGURE 7L

32301 GTAGTGCCAG CTACTTGGGA GGCTGAGGCA GGAGAATTGC TTGAATATGG
32351 GAGGCGGAGG TTGCAGTGAG CCAAGATTGC CCCACTGCAC TCCAGCCTGG
32401 GTGATAGAGC AAGACTCCAT CTCAAAAAAA TTATCTTATG AGTGGGTACT
32451 ATTATTCTCC TCATTTTACA GTTGAGGAA CTGAGCCTCA GAAAGATTAA
32501 ATTTACCCAA GATCACATAG CTAGAAGGCA GCAGAGGCTG GATTCAACTT
32551 AGATTAGGTG AAATCTCCCC TAACAGTCAG TTAATAGTTT GCCACTTTTT
32601 AACTTAAATC CTCCTGCCTC AGCTTCCCAA GTAGCTGGGA CAACAGGCAT
32651 GTGCCACCAC ACCTGGCTAA TTCTTTCTAT TTTTGTAGA GATGGGGCCT
32701 TGCTTTGTTC CCAGGCTGGT CTAAACTGT TGGCCTCAAG TGATCCTCCT
32751 GCCTCTGCTT CCCAAAGTCT GGGATTACAG GCATGAGCCA CCAGGCCAG
32801 CTTTTTTTTT TTTTTTTTTT TTTTTTTTTT AGACGGAGTC TCGTCTGTCT
32851 GCCCAGGCTG GAGGGCAGTG GCATGATCTC GGCTCACTGC AACCTCCGCC
32901 TCCCGGGTTC AAAGCGATTG TCCTGCTTCA GCCTCCTGAG TAGCTGGGAA
32951 TATAGGCACG TGCCACCACA CCCAGCTAAT TTTTGTATAT TTAGTAGAGA
33001 CGGGGTTTCA CCATGTTGGT CAGGATGGTC TCGATCTCTT GCATCAGCA
33051 TCCACCCGCC TTGGCCTTCC AACATGCTGG GATTACAGGC GTGAGCCACC
33101 CCACCTGGCC GGCCCAACTC ATTTTTTTGA TATGCTGTTT TGGTCATGAA
33151 AGTAAATAT TTAATTTAGG ATATTTAAAA GAATACAAAC TGGGTGCAGT
33201 GGCCACGCC TATAATCTCA GCACTTTGGG AAGCTGAGGC GGGTGGATCA
33251 CCTGAGGTCA GGAGTTTCAG ACCAGCCTGG CCAACATGGC GAGACCCGT
33301 CTCTACTAAA AATACAAAAT TAGCCAAGCG TGATGGCCAG TGCTGTAAAT
33351 CCCAGCTACT CAGGAGGCAA AGCTGGAGAA TCGCTTGAAC CGGAGGTGG
33401 AGGGTGCACT GAGCTGAGAT TGTGCCATTG CATTCCAGCC TGGCGCAGCA
33451 GAGAACTCC ATTCTCCCG ACCCCCGCAA AAAAAGAATA CAGAAAGATA
33501 TAAATAAAAA CTTATCCATG TCCACCATCC AGGATATAAA TGAAGTTAG
33551 TTTGTTCCCC TTAATCTTTT TTATGCATAT ATTTTATAT AGTTGAGATT
33601 TGTACATCT TTCTATATGT ATAAATTTGC ATCTTTTTT TTCTACTTAG
33651 CATATCCAGA AACATTTTCC TATGATGTTA AAAAAGATT TTAAAGATA
33701 ATTCTAATAG GTATTTAATA TTATATTGTA TGTGAATGAT TTGGAATTCA
33751 CATATAGGAC ATCATATTGA TCCCTATTAG ATTTATATGG TTGCTTTTAT
33801 CCCATCATT CATTCATTA AGATTCACTT TGGGTCTTAA TTTATCACCT
33851 ATCAAATTAA CTCTCATACA GCTTTAGGTT ATCCATAGAT TTTTCTAAGG
33901 TAGTGGTTCT TCTCTGCAGA GCTCTTTGTT CAAATAAAA CTCTTAAAGA
33951 ATGACAGATA AAAGTTGAAC TGTTCAAAGA TGGTAAGTGG GAAGTTTGGG
34001 AAACCTAGTG ACTAGTGGCC TCTGAAGGAA TTTTCCAGGA ACTCTAGGAT
34051 TTAGAACAAC TTAGCTTTAA GAAAATACAG TATAGGCTGG GCGTGGTGGC
34101 TCATGCCTGT AATCCAGCA CTTTGGGAGG CTGAGATGGA CAGATCCCT
34151 GAGGTGAGGA GTTCAAGACC ACCCTGGCCA ACATGGTGAA CCTATATCTC
34201 TACTAAAAAA ACAAAAATTA GCCAGGCATG GTGGCACGCA CCTGTAATCC
34251 CAGCTACTCG GGAGGTGAG GCATGAGAAT CACTTGAACC CAGGAGGTGG
34301 AGGTTGCAGT GAGCCGAGAT GGCATCTCTG CACTCCAGCC TAGCGCAGAC
34351 AGCGACACT CATCTCAAAA AAAAAAAAAA AGAGAAAATA CAGTATAGGT
34401 CTTGATATAA AATCAGTTTT CAGAAAGCCA CCAACTTCT GCCATTTTGG
34451 ACCACATGGG ACCAAGGTGA CTTTGAATCC AGGGTGACAC CAGATTTTAT
34501 CTCGGGGGGA GCTGAAGTCA TAAGAAGTAA CTAGCTGTTT TGATTACCG
34551 GAGCTCTGAG CCTTAGTCTT CCTTCTGATG TGGGGGTCAA GATTGTGTAG
34601 GCTGTAGAA GATCCAGTT TATTACCTTT CTACACCACA CCATCTCTAG
34651 TTTGTCTCTT AAAGCTGGTG TGCTCAAAATG CAAAATGAAA TAGTTTGAAC
34701 CTTCCAGCAG GTATTCTAAT ACATGTAATA GAGATTGAAG GTTTTCTGGC
34751 TTTCAAAATC CCAATCTAA GTTGAATCCA GGCTCTGCTA CCTTCTAGG
34801 ATGTGACCTT GGGTAAATGT AATCTTCTG AGGCTCAATT CCCTCAACTG
34851 TAAATGAAG AGAATAATAG TACCATTCC TATGATAATA TGTTAATGCC
34901 TGTAAAGCAC AGTTATTAGC ACACAAGACA TATTAAGTGA TCAACTTTTA
34951 AATACAGATG CTCACATCT TACAATGGGA CTATATCCTG ATCAATCCAT

FIGURE 7M

35001 CATAAGTTGA AAATGCACTT TCATATTATC CAGATATAAC TCCATCGTAA
 35051 ATCGAGAGGC ATACTAAGTG CGTATCACAT TCATGTCATC GTAAAGTTGA
 35101 AAAATCATTA AGTCAAACCA TCATAAGTGG AGACTATTAC AAAAAAATTT
 35151 AAATATTATC AAATGTATTA TGTTTATTAT TATTAGAAGT GACTCTGTTC
 35201 TGCTTTTCTT TGCTTCCATA TTCTGTGAGT ATATTCAATTG TTGCATTTTC
 35251 TAATCCTCAA AATTGCTTTC TAGGAGGTTG AGGAAATACC TGGAGGATGA
 35301 GGCAGAGGTG TCAGGAAGTG ATGTGGGAAG CGAAGATGAG TATGATGGGG
 35351 AAGAAATTGA TGAATATGAA GAGGACGTAA TTGATGAAGT ACTTCCTTCT
 35401 GATGAGGAAC TGCAGAGTCA AATCAAGAAA ATACACATGT CAGTATCCCA
 35451 ATAAGCCCTT CTGAGTAATA GGGTACATCT TAAGACAAGC CCTGTAACCA
 35501 GCCAGAAATG TCCTTGTTTT GAACACCTTA TTCTCCTGTG TGCAGGAAAA
 35551 CTATGTTTGA TGATGATAAG CGACAGCTAC GTTTATACCA AGAGAGGTAC
 35601 CTTGCTGATG GGGATCTGCA CAGCGATGGT CCTGGGCGAA TGAGGAAGTT
 35651 TCGATGGAAA AACATAGGTA TCTTGGTTGT TGCTTTTTAA AGCAATCAGT
 35701 TACGGGCTGA GCATGGTGGC TCACGCCTGT AATCCCAACA CTTTGGGAGG
 35751 CAGAGGCAGG TGGATCACAA GGTCAGGAGT TCAGGACCAG CCTGAACAAC
 35801 ATGGTGAACC CCGTCCCTA CTAAAAGTTC AAAAAATTAG AGGCTGTGAT
 35851 GGCACGCGCC TGTAATCCCA GCTACTCAGG AGGCTGAGGC AGGAGAATTG
 35901 CGTGAACCCG GGAGACGGAG GTTGCAAGTGA GCAGAGATCA TGCCATTGCA
 35951 CTCACGCTG GGCACAGAG CGAGACTCCA TCTCAAAAAA AAAAAAAAAA
 36001 AAGCAAAACG TTACAATGCA TATTTGTGCA GTTTCAGATG GCAAAATGGCA
 36051 AGCAAAACTA TAACAGGCTA TGTGAAGACC TAGTGTGAAC TGTTTCTGTG
 36101 TAATGGATGG GAAAAGTTTA CATCATTATA TAGTAAATGA TAAGGGTTTA
 36151 TTTTTTGTCT GTCCAAGCAC CCTCTCCTGT GAGGACTGCC GAATGCTGAT
 36201 TACCTTCACT CTTTGTTTAG ATGATGCTTC CCAGATGGAC TTGTTCCACA
 36251 GAGACTCTGA TGATGATCAG ACTGAAGAAC AGCTTGATGA GTCAGAGACC
 36301 AGGTGGAGGA AGGAGCGAAT TGAACGAGAG CAGTGGCTTC GGGACATGGT
 36351 AGGAGTTTAC CTACTCTGAC CCTAGTTTAT GAGACTGTCC CTTAGCTTGT
 36401 CATGATAGTT TCAAAAATCT AGCTTGTGAT GATAGTTTCA AAATCTTAGG
 36451 CAACATATTC CTATCTCTTT TAATCCTTGA GCTATCTTTT GTGTTTTGAG
 36501 AAGGCTATAC CATAGACAGT TCTCTTCATG TTTGTCTAAG ATTAATTTTT
 36551 TTTTGTCTAA AGCAGCAAAG GCTGCAAAAA GGAAACAAA TACCCAGGA
 36601 ACTCTAGTTT CACAAATCCAG GCCATGCTAA CTATTTAGGA AGGTATAGA
 36651 CTTTTAATGC TGTATATATA TATATATATA TATATATATT TTTTTTTTTT
 36701 TTCAGGCACA GCAGGGGAAA ATTACAGCTG AAGAAGAAGA AGAATTTGGG
 36751 GAGGACAGTC AGTTTATGAT ACTGGCCAG AAAGTTACAG CCAAAGCACT
 36801 GCAGAAGAAAT GGTGAGCTCT TGTTTCTCCT TAGGGTCTAG CCCCTGGAT
 36851 TGTTAGTGGT AGAGCTTTGG AGGTGACTCT AACCTTACAG AGCTGTGTGA
 36901 GCCTAATCAT AAGCTTGTGT CTAATACTGT CTTAAGAGG CTTACAGAG
 36951 GTGGTGGGAG ACAGTGTACT TAGATCTTAG ACTATTGGGC AGTAGAGACT
 37001 GTATTTCATGA GTATATGTGG CTGGTTTTTAC TTTATGTTCT AAGGCTCAGA
 37051 GTAGTTAATT CTGGCTTTCT CTAGTTGCCC AGGATTGTAT ACCTAAGTGT
 37101 TAGAGGTAGG ATTTGAATCC AGGAATATTT AACTCCAGAA ATGAAGCTCT
 37151 TCACTATTCC CTACACTGAC CACTTCTGTT TTTCTTAAAT GATTACTGTT
 37201 CAACCTTAGTT GTGTCTCTTC TTGGAGCCAA TTATTATAGT TTGAAAGTCA
 37251 CCATTATATA GAACAGAGTT CCCATGGCTT TAGCATATTG ATTTAGTTAC
 37301 AAGATTCTTT AGCTTGTTTA GATTTAAAAG TAATTCTAAT CAGCITTTCC
 37351 CAGAATAGGC CTCTCTGTCT TTTCTTTCCA GCCAGTCGCC CTAATGGTTAT
 37401 TCAGGAATCA AAGTCTTTGC TCAGAAATCC TTTTGAAGCC ATCAGACAGC
 37451 GAAGTGCTCA ACAGGTTGGT TGGGAACCTT GTTAATCTGA CATCATAGTC
 37501 TACAGGTTAT AAAGGCCAG GTCCAGCTTA GAGAATAGTC TCTGTCTATTA
 37551 GAGGAAGGAG GTGGCTGCAG GGAAAAAGTT AATGTCAAAG GAGTCTGTGA
 37601 TTCTTTTCTT ATTTGAATAG GGTAGGCATA TGTACCCCTA ATATCTAGGG
 37651 GGAAGCAGGG AGGGAAGGAC TTTTCATTCT TTAGTTGGCA CTTGGGATTT

FIGURE 7N

40401 CGGCGGTTT TCTACAGTTT TCTAATACTC AAGATGTTGA CTTTGACAAT
 40451 ACTTATGTTT GTATACCTGT AATCTTATAA TGGGGAAAAA GTGTATAAAG
 40501 ATGTTTTAAAT ATGATATGTAG TTTTTCATAA AATCTTAATG CCTTGAAGGG
 40551 AAGATTTGCT GTCCAGCTTG AATGCTCAT TTTGGTCTAG TGCCTGTCTA
 40601 ACCTTGAGGA GCATTTTCATT TTCAGGTTAT CTCCATCCCA GGGAAACCCT
 40651 CTGGGCTCTAA ACTGAGAAGC TGCTGCAATT GTCCCTCAC TGGCTTCTCA
 40701 GTCCTAGTGA ATTGATCAAG TTAACCTTACC AAGTGGTTTG GGTTACAGTC
 40751 AGGTGAAGAG GATAATTGAG TTTACATAAA TGGTACCTTC TATTATAGCT
 40801 CTTTGTTTAA AAAACTTATT TTTTAGAGAC AGTCTCATTC TGTTGCCAGC
 40851 GTTAGAGTGC AGTGGCACAA TCATAGCTCA CTGTACCCTT GAACTCCTGG
 40901 GCTTCAGCAT CCTCCTTCCT CAACCTTTGG AATAGCTGGG CCACATTACA
 40951 GGCATATGCC ACCATGCCCA GCTAATTATT TATTTTtagT AGAGACAGGG
 41001 TCTTGCTGTG TTGCCCCAGC TGATCTTGAA CTCTGGCCTT CAAGTAATCC
 41051 TCCCACCTGT GCCTCCCCAA ATGCTGGGGT CACAGGCTCA GCCACCATGC
 41101 CCGACCTGTT ACAGCTTTGA TTGGCCTTTC TCTTTAGTCA AGTTTGTATG
 41151 TACTTCATTT TATCCATGGG TTCAAGATAC ATGTTTTTGC CTCTTCTTT
 41201 GAACTCTCTA AACAGTTCCC AAGGCAAAGT AGCCCTTGCT GGGCAAAAGA
 41251 GAACTGAGCA GGAAGGCTAG ATATTCTTTC CCTCTTGTTT CCCTACATGT
 41301 CTTTGAAGGA GAGATAGAAA AGACAATTGG AATTGACAAC TGAGGATTAAG
 41351 AAAATTGAGC CAGGTCGGT GGCTCACGCC AGCATCTTAG GAGACTGAGG
 41401 TGGGTGCATT GCTGAACTC AGGAGTTGCA GACCAGCCTG GGAACATGG
 41451 TGAATCCCA ACTCTAAAAA AAAAAAAGT AAGAAAAAAG AAAGAAAAAT
 41501 AGTGCCTGAG AAATCCAGGG AGAAATGGT TTCTGGGCTG GCGGTGGTGG
 41551 CTTATGCCTG TAATCTCAGC ACTTTGGGAG GCTGAGGAG CTGGATCACC
 41601 TAAGGTCAGG AGTTGGAGAC CAGACTGACC AACAAAGTGA AACCCCTCT
 41651 CTACTAAAAA TACAAAAATC AGCCAGGCTT GGTGGTGCCA GGTGCCGTGA
 41701 GTCCCAAGCTA CTGGGAGGCG TGAGACAAGA GAATTGCTTG AACCTGGGAG
 41751 GCAGAGGTTG CAGTGAGCCG AGATCACGCC ACTGCTCTCC AGCATGGGCG
 41801 ACAGAGTGAG ACTCCCTCTC AAAAAAAGT AGAAAGAAAG AAGATGGTTT
 41851 CTGATTGAGG CTCCTGGGAG AAAGCACTCT TTGGAGAAAG AAAAATTGAG
 41901 TCAAACCTCG GGTACTTTT CCTTATGCCA GGATGGCTGC TATAAAGTAA
 41951 GCTAAGCCTT GATCTTGGA ACAGGATTGA CATGGACAGT TTCAATCTGA
 42001 CCCATATGCC CTTTGGCCAA AGCATGTAGC CAGCAGCATC AGTTATGTTT
 42051 TAATGAAATT GAAGCCCCAG GACCTGCCAC TATGGCTCTG AGGAGGACTC
 42101 AGCTTCACTA GCTTGGAAAT TACATATTG GAGGGATTAG AGCCCATGAG
 42151 TGTGGGAGAT AGGCTAGGCT CAGTGTCACT GTTTTTGTTT CTTCCTTGTT
 42201 CCATACACTT GAGTAGGGAT ACATGGTATT AACCTCTTTA AACAGGCTCT
 42251 TAATTTTCATC TCATTAAATC ACAGTTGCAC AGCCATACATA GGGTCTCTCT
 42301 CATAAAACCAT AAGATTTTAT TCACCAAAGC TCTAGAGACA AGGTACTCAG
 42351 ATCTCTGTGG CATCCCTCAT TTTCTCAACT GCTTCTCTAC AAACCTCTCC
 42401 TCACTTTGAG AGTTTCTAAT GCTCAGGCTG GGAGACTTTT TAGGGGTGTT
 42451 TTTTGGTTTT TATCTCTTAG GGTATGTCT AATCACTCTT GTGGCATCCT
 42501 GTCTGGGAT TGTGCTCCT AAGGATAGAG GAGAGTATTT CTGGGAGGAG
 42551 TGTTCCCATG ATACTATTG ATTATGTCAT CCTTGAGATG GTATTGTATC
 42601 TTTACCCCTT ATATCCTACT CATCGCCTGG CACACAGCTT GGAATGTAGT
 42651 GGTGCCCTACC ACAGTTTGAA TAAATAACAC TACACTTTTC AGAGCCTCTG
 42701 TTTATAAAAT GAGGATACTA AGTCATGGCT GTCTCAGAGT TGC'TGGGGG
 42751 CTTCAGTTGG AAAATGTATG TCAGTGCATT ATGTCAAGTG CCACTCTGTA
 42801 AGCATAAAGAA ATTGCCAGTA GCTCCAGAAA AAAAGAAATT CACCTCTTTT
 42851 GAGAAATGAAA GAAATTACCA GTATCACAAT TATATCATAT ATTGTAGGCC
 42901 ACTTCTGAAA GGGCCATTGT TTCTCAAATA TCTCAAACCT AAAATGAAAA
 42951 TGIGATCTTC TCTAAAAACC TGCTCTTCCT CCTGTATTTT CCATTTTCAGT
 43001 AAAAGGTACC TCCATATATC CAGTCACTCA GACTGGAATC CTGAGAGACA
 43051 TTCTTGACCT GTTCTTTAAT CCTGTAATCA GACAATTTC AAGTTCGTGT

FIGURE 7P

43101 ATTTCTACTT CCAAATTGCA TCTGGAATCA GCTCATTTCT TCCAGCTCTA
43151 TGGCCAGCCC CCTGGTCCAA GATTCCACAA TTTCTTTCTA GGGTCCCTACC
43201 GTAGCCCTCCT GACCCCCCA CTCTCTGTTT TGCTTCCTTT TCATCCCAATC
43251 TGCACAGCAG CCAGAGGCGA CCTTTATGTA AATATAAATT GGAGGATGAC
43301 ACTTCACTAC TTAAATCTTT TTAATGCTTT CCGCTGCACT CAAAGTTCAA
43351 ACTTCTCATG GCCGATGCAT GACATAGCTC TGCCCTCCCA CCTGCTGTCT
43401 ACTCTTCTTT CTCATGACAT GCAGCCTCAG GAGCATCTAA AGTGTCTCT
43451 TTCCCTGGAA TGCCCTCCCC TACATCCATC CTCCTTCTTT GTCTGACTAA
43501 TGCATAATTC TCAAGGTGTT AGCTTAAGCC TAATTTCTCT AGAGAAGCCT
43551 TCTCTGACCA TTAACACCCC TTTCTTTTTT CTTTCTTTCT TTTTTTTTTT
43601 TTTGAGACAG AGTCTCGCCC TGTCGCCCAG GCTGGAATGC AGTGGTACGA
43651 TCTCGGCTCA CTGCAACCTC TGCCCTCCCG GTTCAGGCGA TTCTCTGCC
43701 CCAGCCTCCC AAGTAGCTGG GATTACAGGC ATGCGCCACT ACACCCAGCT
43751 AATTTTTGTA TTTTCAGTAG AGACGGGGTT TCACATATGTT GGTCAAGCTG
43801 GTCTCGAAGT CTTGACCTCG TGATCCGCC GCCTTGGCCT CCCACAGTGC
43851 TGGGATTACA GGCATGAGCC ACCAAGTCCA GCCTAACACC CCTTCTTAA
43901 TTAGGTTACC TTTGTATAAG TTTCTATTC TTTTTTTTTG AGATGGATTCT
43951 TCCTCTGTCT GCCTCGGCTG GAGTGAGTGC AGTAGCAGA TCTCAGCTCA
44001 CTGCAACCTT TGCTCTCCCC GTTCAAGCAA TTCTGCCTCA GCCTCCCAAG
44051 GGGCTGGGGT TACAGGCACG CACCACCACA CCGGCTAAT TTTTGTATT
44101 TTGATAGAGA CGGGGAAGGT GTTAGCTTAA GCCTAACCTC TTCAGAGAAG
44151 CCTTCTCTGA CCATTACCAC TCCTTTCTTA ATTAGGTAC CTCTGTTTGA
44201 GTTCTTTGTT CTTTTTTTTT TTTTTTTTTT TTTTAAATAT GGATCTTAC
44251 TCTGTACACC AGGCTGGAGT GCAGTGACGT GATCTTGGCT CACTGCAACC
44301 TCGGCTCTCC GGGCAATCAA TTCTCTGCC TCAGCCTCCC AAGTAGCTGG
44351 GGTACAGGT GTGCACCACC ACATCTGGCT AATTTTGTG TTTTGTAGTG
44401 CCAGCTAATT TTTGTATTT TAGTAGAGAC GGGGTTTAC CATGTTGGCC
44451 AGGCTGATCT CGAACTCCTG ACCTCAAGTG ATCCAGCTAC CTCAGGCTCC
44501 CAAAGTGCTG GGATTATAGG CATGAGCCAC CACACCACAG CTTAGGTTTC
44551 CCATTCCTTT GGGTCTGTCA TCATGATGTG TTACTTTAAT GTTCGTTGAG
44601 GCTTGCTTTT CCTACTAGAC TGTAAGTGCT GTGAAAACAG AGCATATCCG
44651 TTTTGTGAA AAATGTATGC TTTGGGTAGC ACCATGCCGT GCACATAAAA
44701 TAATTCAATG AATTTTTTGA GCAATGAGTG ATGGGAGGCC TGGAAGAGCT
44751 AATGGTGAAA AGCATAGAGC TGAATTATAT ACAGAGGAGC TTTCTAGTGC
44801 AGGACAGAA AGAGGTGTAG AGCTTAGTCT CTTGCTCTTT CTGAGCTTG
44851 TAAGCATCAT GACTTTGGGT AAGTCAGTCT CTTTTTCTCT CAACTGGAAA
44901 ATGGGGCTCA TGTGAAATGA CTTGGTTTAG CTCACAGGCT ATGGTTAGGA
44951 TCAAAGGTCA AAATTAATGT GAAGTGAATG TACATATTTA AGAGGCTGCA
45001 CTAATGCAGG CTAACCTACT GCTGAGGAAT GGGTAGAGCT GAGTGGGAAG
45051 GAGAAGCCAA GCCCCAACAA AGCTCCATAG TCCACCAATT TGGGCTAGCT
45101 ATGTGCTGAG ACTTGTGATA GCAGTAGAAA TGGAGGCCGT TGTGTATGCC
45151 TGGACTCCAG TGAAGTGGGG AGATAGACGT GGCTTGTGTA TGGCTGTGT
45201 CACCTCAGAT TTTACCTTTT GAGACCAAGG TGCCCTGGTT CTGTCCCAG
45251 TAGTTTTATT GTCTTGGTCT GTACCATCCA CGTCCCTCCC ATCCCTCTTT
45301 TTTGTCTCT CTCTCTCAC CTTAAAGGTT TTTCAATTTT AGTTTATTGA
45351 TTTAGTTCTA CCTGTGGTG GGATTCATAA TGGGAAAAGG GAGTTTGAAG
45401 TAGCTACAGC CTAAGGGTGA TTGGAAGGAG TTGGGGTGGA CACCTGAGTT
45451 CCTTCCCTTC ATTTTAGAGA GAACCGTAGT CCGCGGAATT CTTATGGCT
45501 GGTGGGCTAG ATGTAGGGTT GAAGAGGCAG CTCACAGCTC CAGGCTGGAG
45551 AATTATTGCC TAGTCCAAGG GGTAGAAAGT GCTGAGGAGG GGTGGGAGT
45601 GAGCCGTGGT TTGGGTTTTT TGGCCCTCAT CTCTTTTTCT CAGAGGCTGA
45651 AGGAAGGAAA AAGGCTGACT GCCCACCCTT CTGTTTGTGT GTCTTGTCTA
45701 ATTTAACTTA CGTTATTAT CAAAAGACA GGTATTATTGG AAAACCATG
45751 GGACCTAGGC AAAAATCATC TGGGTTTTCC AAACGTGAAA AATTAGTTC

FIGURE 7Q

45801 TGGGGGCCCA GCAGGAAAGG CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG
 45851 TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TTTGAGGGGA GGGTGAGGTT
 45901 GAGTGAATGT CTCTGTAGTT AGACCCAGAA ATTTGTTCCAT GACTTCCAAG
 45951 CATACTCCCT CCTTCATTTT CCTTCAAGTT CTTTATGATT AGAATCTAAA
 46001 TGAGAAAATT AAAATCTTCA TGTGGTTGCG TGGATGTCTT AATTGACCAA
 46051 GGATTAGAAC CCATCAGGGC TATAGAAGAA CAGCAGCTGA CAGTTTTCTC
 46101 TATCTTTCCA GCCCTCAGTC CCTTACACAG AGTGGGCAGG TTAGTGAGAG
 46151 GTGCAGGGTA CTGAGAGTTT TCTGAAACAG AAACCTGTGC TTCTTGTCCC
 46201 TTCAATGTTA TTGTTCCAAA GAGTTGCAGC AAATATGGAG GTTAGACATT
 46251 AGGGAAGAAC TTATCATCAA CTTTCTGATG ATCAAATGGC TAAAAGAACA
 46301 CTGAGGATCC AGGGCTGTCT CTCCATTGAC TATCCAGGGA AGGAGCTAGC
 46351 CCAGTTTCTT TTTGGGCAAT GGTGGCTTGC TCTGTAGCTA CAACCAGGAA
 46401 TTTGTAAAAC TTGTGGTTTT GGGCCAGGCA TGGTGGCACA TGCTGTAAAT
 46451 CCCAGCACTT TGGGAGGTTG AGGTGGGGGG TTTGCTTGAA CTCAGGGGTT
 46501 TGAGACCAGC CTGGGCAAAA TGGCGAAACC CCATCTCTAC AAAAATATA
 46551 AAAATTAGCT GTGCATGGTG GCATGCACCT GTGGTTCCAA CTACTTGGGA
 46601 GGCTGAGGTA GGAATCACT TGAGCCTGGA GGTGTGTGGT GCAATGAGCC
 46651 AAAACTGCAG CATTTGCATT CAGTCTGGGT GACAGAGTGA GACTGCCCTCA
 46701 AAAGAAAAAA AAAAAAAAAA AAAAAGCTTG TGGTTTTGTT ACCTTGAGCA
 46751 GCAACATTTT TAGGAAGGAA TTAAGCAGG AGGCTATTGA GCGATAGCTC
 46801 TTGGCTGCCA TAGAGGAAAT GTTCTGGCTG AAAGCAGAAA GCAAGCCATC
 46851 CAGTTTCATC ACATATGCAC ACACACAGAA GACAGCCAAG ACCCTTTCTG
 46901 GCCTGAGAAA TCTTTGGCGG CAGCAATAGC ACTTGTCCCA TTGTGAGTGG
 46951 CATTTTTTTC AAAGTGTCTT TGGACTGTGA AAGCTACTTA ATAACCTGAT
 47001 CTCATCTGAA TAATCTGAGT TAATACTAGC TTCACAGTTG TGAGGATTAA
 47051 ATAAAAAAAT ATTGTAAGT GTCTGCCTCA AGGCCTGGCA CAGAGTAAAT
 47101 CTCACAAAT GCTCGTTGAA TGAATGAATC CATGAATCTG AGCATTAAGG
 47151 CCCCCCTCAC CGTTTCCAAG GATCAGTGCA TAACAGCCCC GGTAACTGAG
 47201 ACTTGTAGAC TGTCCTCACT GAGCCTGCAG CCTGAGGACT GATCTAAACC
 47251 TGCTGTTCCT TTGACAAAAT TTTGATGAGT TATGGTGTGG AGGGTGGACC
 47301 CTTCCATGAA GGCCTTGTG GCCTAGCTGT TGGAAAGCACT ATGCAGACAG
 47351 TCTTCCAGGG TGGGAATTGC CTCAGAGAGC ACCTTGCCCA AGGTCAAGGA
 47401 TAGCCACAT TCAATGGCAA CAGGTGTGTA ACGGCCTGGC CTTCTTAGCT
 47451 TATTTTGGGT CAACTCTGAA GGGCCATTCT AGCTTCAGAG CTCCTGTGG
 47501 GGTGGGTGTA GGCTGTCACT GGCTTGTCTT GTAGATCAGC CTCTTCTCT
 47551 GGGCACCTCT GCTCATTCTC ATTCTTCCAC AGCTGTTGAT CCCAAAGGAG
 47601 GTTCTTAATA AACATCCAGC ACATTAACA GTCTCAGAGT TGGCTTCTGT
 47651 GGAATCCAA GCTATGAATG CACTAGTCTT GGTGGCCAAG CTTTAGAAC
 47701 AACAAAGAAC GGAGACTCCT TTGCAATGGA TTTCCAGCGT TGGAGGTGTG
 47751 GATACTGTCT CTTTATGCCC ACCAGAGGGC AGCAGCATCC TAGCCACCTG
 47801 CCCTTCTGAG GCTCCAGGAG TGGGCTTGAA GCCTTTTCCC CGGCAACTTC
 47851 ACGCCCCACA CAGATATTGG CGAGGATCAC CTCCTTAGG GTGTTCAACC
 47901 TCTGACTTAA AACACAAAAA CTTTCTTAAA CTGTCCAGGC CTTAGTTTGT
 47951 TTAGTCTCAA GCTCCTGTAC CACCATCACT GAAGGCCAAT CAGTCTTCTT
 48001 ACTGTGCCCC TTCCCTGCT CTCTGTCGGG CAAGCTCCGT CCGTGGGATC
 48051 CCCACCTCT CACACTTACC ACCACAATA GATTGTGTTT TGTGTGTACA
 48101 AGGTAATTAC AAGCTTGGGG CCAGTAGGCC CAGGGGCCAG TCTGAGGATG
 48151 GTCACCTCAT TCTGGCTCTC COTGTTCTGC TAACGGTATT GATTTTCAGT
 48201 TTTATTATT ATGATGATGT GTGTGTGTGA TCTGGCCCTG GTGACATGAC
 48251 ATATGGAGGC AAGAGGGCGA GAGCAAATTT CTTTGTGCTA CATTGTGACT
 48301 TCTTGAAACC GCACCCCCAC CACCACCACC CAGCATTGTT TATTACAGG
 48351 TTTTAGCATC TTTGCTTACC TGTCTTCATT CTGTCCCCTC ATCCCCAAG
 48401 ATTTCTAAGA GATTCTTCTG GGAATTGGAG CCAGATGATG GTGACTACAA
 48451 GAAGGAGGAA AGGGTCTGGG AAGAGGAGTG ACAGCAGCAA GCATACTACC

FIGURE 7R

48501 TTTTGTAGC AGCCATTAAC TCATCCAGCA AACATTTACT ACATTTCCAT
 48551 CACCTGTCAG TTACTTCTAG GCTAAGCTCC CCAACTCCCT GCTGGGGGCC
 48601 ATCCTGGAGA CAGGTTTTGC TATGCGCTTT TTTTTTTTTT TTTTTTTTTT
 48651 GTCTGCATCT GTTCTATAGG GTGTGTGAGG AAAACCTGGC CAGAAAGCTT
 48701 TGAGAGAGTG AGATTGAGTT TGGGTGCAAC CAATCAAAAG AACGATGCTT
 48751 GCCTGAATTT AAGGCTACTT AAGGCTCCCT GTAATGTAGT CTAATTCTCT
 48801 ACGAGGAAGA GGAAGGGCAA GCTTGAGGCA AAACATTACA AGTGGGAGGG
 48851 GGCACCTCTGA ACTGCAATGA TTGCGGTGGG AATCAGCTGA GGCTGAGGGC
 48901 GATTTGTGGG GCCATGTTTC CCCAGCCTGT CTTCTCTGTG CGTGCCAGGA
 48951 GAATGAATAA ATCATTGTTT AGGGGCGGGA TGCAGCTGCC GAGCTCCTCC
 49001 CCTCGGCACA TGCCCCAACT CCAGCTCCTC CATTGAGGGC TGCTGGAGCA
 49051 GAGCGGTTTA TACACCCAGC TCCCCAAATC CTATTGAGGC CTCGCCCTCC
 49101 GCACGAGCCA CCGGCTCCAA GCCCATTCAG GCTGGCCCTT TGTGCTGGGG
 49151 GTTAAGTGGT TACATGTGGG GGGCACCAG AAAGGAACTG TCAGGCTCTG
 49201 AAAGGCTGTG CTGATACAGT GCCCTCCTAC TGATGAATGG GTGTGGGTGA
 49251 GGAGAGGTGG GCGGCCGGAG GGTGGGGTGG GGGAGAGGGC ATGGGGATTA
 49301 TGGAGCCCAAC AGAGGCAGCT GCTAGGAAGG GGGTGAAGA GGCACCCCTT
 49351 TCTCTCTTTC CTCTTCACT TCAGCTTCTC CGTCTAGCTT ACTCCCTCTG
 49401 TTTGTGGGAC TGGATGATCA AGAGCCTTGG GACCTTGGAT TTGGCTTTTC
 49451 TGATGTCCCT GTGACCGCTT GAGTGCACGT GAGAGAAAGA ATTTATATTA
 49501 CCTTTCATTC TTCCAGCAGC TCCGAAAAGA CCTGTTTCTC CCTTTTCCCT
 49551 TGGAAAGGGT GGGTGAGAAG GGAACAGTG TTGGGGACAG GGGGAGGATT
 49601 CATTTCTTAG GTTCATCTGG TGCAGTGGAT TTGACGTGCT GCGCTGCCGA
 49651 ACTTTTAAAA GCTTCTCTGA AGTTCCTCTG GAGCCCTTAG GTGGAGGGTT
 49701 TAGGGGAAGA CAGATCTCAA ACTGGATATA TTGGAAGAT TTTGTTGAGG
 49751 AAAAAGAAAT TACTTCAAGG CTCTAAAAAT GCTTTAAATC TTCTAAATGA
 49801 ATGTACCGCC TTGTCAATTT ACAGCTGGGA AAACAGCCAA AATGGAAGAT
 49851 AGGGGAATGG GCATATTTTA CCTAAGGTAA ACACATAGTA ATTTCTTGAT
 49901 AGACTAAAGA GGCACTTTAC CTTTAAGAAG CAGTAGAGAA ATGGATGAAC
 49951 AAAACAAGTA GGTCACTCAGC TTCCTAGGCC TTCTTTTCCC AAGATGAACC
 50001 AATTCTGGGG AATAATGTTT GTTCCAATCT GCCTTAATGG CTCTTTGGCA
 50051 TGTCAAAGGT CCTCTGGGGT TGTGCTCGT CTGCGGAGCC CAAGTGACAA
 50101 TGTTCAACCAC TATGTTATTG AACAAATTTT AAGGCATATT ATTTTATTTA
 50151 GCCCAAAAAG GTTAAATGA TTTGATTTGC CTAAGTTGCC AAAGCCATGT
 50201 GGGGAAGTTG ACAGATGATG TGACCTCAGG AAGAGAGAAG AAAGCAGGTT
 50251 AGCAACGTAG TTTGTAATCC AGGATCGTGC TTTGTTCTGA TATGAAACT
 50301 CTGAGGGCTT CCTCAGTTAC TTCCCTGCTG TCCCCAGGAT GGAGCCCAAG
 50351 CTCCTTGGGA TGGTGTCAAG AACTTTTACA ACTGGGCCAA CTTTATCTTC
 50401 TAGCCTCACC TTACCTCCAT TTCCCACCGA GCTCCAGCCA CACTGGCCTA
 50451 CGGGGTGTTT CCTGAACCTA CTCTGAAAAT GCAGTCTCCT ATGCTTCTC
 50501 TTGCTTTTCT TTGGTGAGCT CTTATTATAT CCTCAAGGCC TGGCTCAAT
 50551 ATCACCTCTG TGCTAGCTGG GTTTAGTGGC TCATGCCTGT AATCCAGAA
 50601 TGTGTTGGAG CCAAGGTGGG AGGATCACTT AAGGTTGGGA GTTCGAGACC
 50651 AGCCTGGGTA ACATAGCAAG ACTCCCATCT CTTAAAAATA AAAAAATCAC
 50701 CTCTGTGAAG CCTTTCCTTA CCTTTTCTG GGCTTACTAC TTTGCTCTCC
 50751 TGGCTCTGTT GCAGGGCCCA TTACATTGTT ATAGCCCATCT CTTCTGTCTA
 50801 TTCTTTTCTT TTGAGACAGG GTCTGGCTCT GTCAACCAAG GTCAAGCAGT
 50851 GTGGTGTGAT CTTGGCTCAC TGCAACCTCT GCCTCCCAAG TTCAAGCAGT
 50901 TCTCGTGCTT CAGCCTCCCA AGTAGCTGGG ATTACAGGGC TGTGCCACCA
 50951 TGCCCGGCTA ATTTTGTAT TTTTAGTAGA GACGGGGTTT CAGCATGTTG
 51001 ATCAGGCTGG TCTCAAACCT CTAGCCTCCA GTGATCTGTC CGCTTCGGCC
 51051 TCCCAAAGTG CTGGAATTAC AGGCATGAGC CAACACACCA TGACTTCTGT
 51101 TTCCCTTTCT AAACAAGGAG CTCCCCAAGA CCACGACGAG TTCTGATTTCT
 51151 GCTCTGAATT CCCAACACAG TACCTGGCAC AAAGTAAGCA CTCTGTAATC

FIGURE 7S

51201 GTATGATACA TGTAATGAA TGGGTGGGAA GGGACAAGGT CTTTGAAGCT
51251 GAAACACCTT GATCTTACCC ACCCCTTTCT TCCTGAGAAT ACTGATATTG
51301 AGAAATATC CACCTATGAA TAACCCCTAG GCCTGTCTCA TTTCTGGAT
51351 GAGAAATTCC TCTCATCTTC TCTGGTCTCC TTGCCCTGACA CCCCAGGCC
51401 TGGGACCTGG ATCTGGCTAC TCACCTGCTAG CCTCTCTTGG CTCTGCATC
51451 TGTTTGCCAA GAGGCTTACC CGCTGTCCAT CATTTGGGTCT TGATGGCATG
51501 GCCTTTTGCA AAGCCCTGTT CAGGCTGATA CTGGCCATCT CTGGAGGTTT
51551 CTGTGTCTTT GCCACTTAAG TTCTTGGCAT ATATGTGGGT AGGTGAACCC
51601 AGCCACAGAT ACCCTTTCAC TTGGGGGTGA ATTATCTCT GGTGTCTCTA
51651 CTGGAAGAGC CTCTGGCAAA TGAATAACAG GCATCTCTAT AGCTGCTTTT
51701 TTGTCTTCCT GTGGACATGG ACATCCCTGC ATTTGGAGCT TTTTTTCTT
51751 CAGGTTTTGA GCTCTGAAAA TTATGGAGTG ACCAGGACTG CTGTGTGAGC
51801 ACTGACTGTA TTAATTATAC AGTGTAGAA TATTCCATAC AACACTGCCC
51851 TTGATTAACA AAACCTGGTA CAGGCTGGGT GTGGTGGTTC ACGCTGTAA
51901 TCCCAACACT TTGGGAGGCC GAGGTGGGCA GATCACTTGA CCCAGGAAT
51951 TTGAGACCAG CCTGGGCAAC ATAGTGAAC CCTGTCTCTA TTAGAAATAC
52001 AAAAATTAGC CGGTGCAGTG GCACACGCTT GTAGTCTCAG CTAAGTCAAG
52051 GGCTGAGGCA TGAGAAATCG TTGATCTTGG GAGGCGGAGC TTGCAATGAA
52101 TGGAGATTGC ACCACTGTAC TCCAGCCTGG GCAACAGAGT AAGACTCCGT
52151 CTCAGGGAAG AAAAAAGAA AGAGAGAGAC TACAATCTGA TTTCTTTTAA
52201 ATGAATTAC TTAGCTTAGC AGGTATTGTA TTATTTAGGA ATAAGTAGCT
52251 TTAGGCGCAG TGTTGGTGGCT CACGCTGAA ATCTAGACAC TTTGGGAGGC
52301 CAAGGCAGGC AGATCACCTG ATGTGAGGAG TTTGAGACCA CCTTGGTCAA
52351 CATGGTGAAA TCCTGCCTCT ACTAAAAATA CAAACATTCA CCAGGTGGCG
52401 GGCACCTGTA GTCCCAGCTA CTCAGGAGGT TGAGGCAGGA GAATTTGCTT
52451 AAACCCAGAC GTGGAGGTTG TAGTGAGCCA AGACTATGCC ACTGCACCTC
52501 AGCCTGGGTG ACAGAGAGAG ACTCCATCTC AAAAAAAAAA AAAAAAAAAA
52551 GAATAACTAG CTTTTAGAA CAATGGAATT GATGACTCAG CTATTCAGG
52601 CTGGGGTGCT GCCCTGCAGA GCACGATATA GGCTTTATTT ATTTTATTTT
52651 AATTTTTTTT TTTTGAGACA GGGTCTTACT CTATCGCCCA GGCTGGAGTG
52701 CAGTGGCAGC ATCTTGCTC ACTGCAATCT CTGCTCTTTG GGTTCAGGCG
52751 ATTCTCTGCT TTCAGCCTCC TGAATAGCTG GGATTACAGA CGCGCACCAC
52801 CATGCTGTGC TAATTTTTGT ATTTTGTAGTA GAAACGGGGT TTTATCATGT
52851 TGGCCAAAGC TGCTCGAAT TCCAGCCTC AAGTGAATCCG CCTGCCTCGG
52901 CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GCCACCACAC CAGGCCCAAT
52951 ATAGGCTTTA AATCAATGTA TATAATGCTT TGTCCTTTGT GGCCAGAATG
53001 CATAACAAGA AGAGGTAGCG GTGGTTGTGG CACCTTATAT GATTACTCTA
53051 AGGACTAAGA GTTTTCTTCC TGCTCTGAG ATTCGTGGTA TTGCAAGTCA
53101 GAAGGTGATA GCATCGGCCA GGCACAGTGG CTCACACTGT TAATCCGAGC
53151 ACTTTGGGAG GTCAAGGCGG GCAGATCATT TGAGGTGAGG AATTTGAAAT
53201 CAGCCTGACC AACATGGTGA AACCCTGTCT CTACTAAAAA TACAAAAAAT
53251 AGCCGGGTGT GGTGGCAGCG GCTGTAAAC CCAGCTACTC GGGAGGCTGA
53301 GGCAGGAGAA TGACTTGAAC CTGGGAGGCG GAGGTGAGC TGAGCTGAGA
53351 TCGCGCCACT GCACTCCAGC CTGGGTGACA GTGAAACTCT GTCTTGGGAA
53401 AAAAACAAAA CAAAACATGG TGATAGCATC ATGGGAGGAA TGTTTCTTCT
53451 AACCAGAAAA CACAAAGATG ATTCCTGGG ATTTCTGGCTC CTGTAGACAC
53501 TAGAGGAATA GGAGAAGGGG GTGGTCTCAG TGTAGACTGG AATGATCATG
53551 GCTACCAAGG AGAAAGGGG TTAAGTGTAC CTAATAAGTG TTGAGAGGTG
53601 CGTGAATGGA ACCCAGAGAC CCTGGGGTCA CCACCTTGTG CATTTGTAGT
53651 AATCAGCATT CTTTCAATTG TCGGTGAAAG AAATTCACAT CAAAGTTAGG
53701 TTGCAAAAT AAGGCATACA AAACATAAAG TTTAGATGCA GGAACAGGG
53751 TCTGCAACAT TATCAGAACT ATCTCTCATC TCTGTTTCTT CCTGCCTCG
53801 TCTTCTTTTA ATTTCTTTT AGAAGATCCC AGAGAGAGAC TCTGACTGGC
53851 TCACCTGGAG TGGAGTCTT ATCCCTGGAT TCTTACAGCT TTTATTTGAC

FIGURE 7T

| | | | | | |
|-------|-------------|-------------|-------------|------------|-------------|
| 53901 | CCACATGGTT | AAGCTGGGAG | AGACAGAGTC | CAAAGAGAGG | CGGAGAAGGG |
| 53951 | CTATTCTTGGG | CAGCAACAAAC | AATTGATGAC | TTTATGGGCT | TGTGCTCTGG |
| 54001 | CGACAAGTGC | ATACACCTAG | ATCACCAAAG | CTGAGAGCCT | TTAGAGTGA |
| 54051 | GGATTTTGGGC | CAGGCATTGGT | GGCTCACGGC | TGTAATCCCA | GCACITTTGGG |
| 54101 | AGGCCGAGGT | GGGTGGATCA | CAAAGTCAGG | AGATCAAGAC | CAACCTGACC |
| 54151 | AACATGGTGA | AACCCCATCT | CTACTAAAAA | TACAAAAATG | AGCTGACGGT |
| 54201 | ATGCATGCAC | CTGTAAFTCC | AGGCTACTCAG | GAGGCTGAGG | CAGGAGAATG |
| 54251 | GCTTGAACCC | GGGAGGTGGA | GGTTCGGGTT | AGCCAGAAIT | GCGCCACTGC |
| 54301 | ACTCCAGCCT | AGGCGACAGA | GCGAGACTCC | ATCTCAAAAA | AAAAAAAAAA |
| 54351 | AAAAAATAAA | GTGAGGATTT | GGGTGACCCC | AGGCTGAAGG | CCAGGGGAGA |
| 54401 | CTGAAGTGGG | TAAAGGAAGG | GAGAAGACTT | AGGCCACAGG | ATCTGATGTA |
| 54451 | GAATGGGGC | TGACGCTCTC | ACCTGTATTT | TCTTACGCTG | AGGAGTGTGC |
| 54501 | AAAGTTTGA | TTACTTCTGC | CTTCTCCTTC | TTATTTCCTT | TTCCCTTTTA |
| 54551 | AAATAGTCAT | CATAATCATA | AAAAATTTCT | TTCCATTTTC | CTCGTTTGTG |
| 54601 | CATATAGGAT | TTCTTGTGTT | GATTTAATTT | GCCAATTTCT | CTCTAGGTTG |
| 54651 | CAGAATGGTG | CTTGGGAATC | AAATTGAAAC | TGGAAGAGGG | CACCTCATAT |
| 54701 | ATTAGGGTCA | GCAATTACTG | AACCTGTGTC | TCCTTTATTC | CAAAACAGGGC |
| 54751 | CCCCAAGTTC | ACATTTCCCC | AGGGTGCAAA | AGAGTGAAGG | GGGTCAAGCT |
| 54801 | TCGATGAGT | GGAGCTCTGA | GAGAACTCCA | CTGGAGTTTG | GAAACCAAGA |
| 54851 | CCCTTTTTTA | TCACGCTGTT | CCTCCTCACC | TGGGCAAAAG | CACTGGTACC |
| 54901 | CACCTTCACG | GCATCATGGG | TGGGCTCTGT | GTCTTCGGGA | GAGCCCGCGT |
| 54951 | CCCGGGTACG | GGACATCAGC | CCTGAGCCCT | GTCCAGCGGT | TGGATCTTCT |
| 55001 | TTCTCTCTCT | CTCTCTTTTT | TTTTTTTGT | TTTTTTTGT | TTGAGACCGA |
| 55051 | GTCCCACCT | GTTGCCCCAG | CTGGAGTGCA | GTGGTGCACT | CTTGGCTCAC |
| 55101 | TGCAACCTCC | ACCTCCCAGG | TTCAAGCGAT | TCTCCTGCCT | CAGCCTCCCA |
| 55151 | AGTAGAGTGG | ATTACAGGCG | CCCGCACCA | AGCCCGGCTA | ATTTTGTGAT |
| 55201 | TTTTAGTAGA | GATGGGGTTT | CACCTGTGTT | GCCAGGCTGG | TTCAAACTC |
| 55251 | CTGACCTCAG | GTTATCTGCC | CGCCTCGGCC | TCCCAAAGTG | CTGGGGTTAC |
| 55301 | AGGGCTGAGC | CACCGCACCC | GGCCTCAGTC | ATCTTAGTCA | AGTAGAGACA |
| 55351 | AAAAGGATA | TATAATTCCA | AATTGTGATA | AATGCTATGA | AGAAAGAGAA |
| 55401 | TGTGCTCTGA | CATAAAGGGG | GGAACGAACG | TGATCTAGGG | AGTCAGAGAT |
| 55451 | CTCTCCGAGA | AGAGATCTGA | AATAGGAGTA | AGTCCTAGG | GGGAAGAGAA |
| 55501 | TGCTAGACCG | AGGGAACATG | CGCTGCCAAA | CGCCGCTGCG | GGAAAGGGGC |
| 55551 | GTGTGGGAGG | GTAACCTCGG | ACAGGGGAGG | TAGAGAGACA | AGCCCGGCGA |
| 55601 | CGCAGACGAG | GCGAGGACAG | ACAGAGCCCC | CGCGTACCG | CCTTAGGGGT |
| 55651 | TGTCCTCGCG | GTGGGGAAGC | CATTGAGGAG | TTTAAACCCG | GAAGGTGGTA |
| 55701 | ACTAATCAGA | TTCCACTGGA | AATAGGCACG | GTGTCTCAG | CGAGGCTAAC |
| 55751 | TGATGGGAGT | GGCCACATGA | ATGCCATAGA | GAGATGAGCA | CGGAGCTTGA |
| 55801 | AGGCCTGGGT | CAACGCGGCC | CGCGCGGGGG | GCGAACGGCT | TCCGCGCAG |
| 55851 | GGGCCTGGCG | CGGGGCTCCG | CGGAAACACG | AACCGGCCCA | CGTGCGGACG |
| 55901 | GTGCTCTCCG | CTGTCTCGCC | AGACGCGCGC | TGACTTCGCA | GTCCGGGACT |
| 55951 | GGGGCTGGGC | CGCCTCGCCC | GGAGCCCGGC | ACCCACAGCT | GGACCGCGGA |
| 56001 | GAGCGCCAGG | CGAGGAGAAC | CCGACGCCCA | GGACTAGACA | CCACGAGGCT |
| 56051 | CGGGCGGAGC | CAGAGCCAGA | GCGGCGGGAG | CGGGCGCTCT | TACGCCGTGA |
| 56101 | GTCCGAGTGT | CGGGCCGAG | CGGGGCTGGG | GCTTGGGGCT | CAGCCCGCGG |
| 56151 | AAGCGGGGAG | TGAGGCTGGC | CTCTCTCAG | GAGACTAGGG | AAGGATGGTT |
| 56201 | TCTGTCTCCT | GGGGTGGTCT | CCCATCTCCG | CAGGCGCAGA | AAAGAGGGCT |
| 56251 | GCCTCTCTGT | TGGGCGGAGA | CTATGTCCTG | CGGTGTCCGG | GTTCCTATTT |
| 56301 | TACTATCTCT | GAGAAGCCCTG | TGATCCCTAG | CGCCACCCCC | ACCCCATCCC |
| 56351 | AGCTTCTCTT | ACGGCCCCAT | CCAAGTATAG | GAATAATAAA | AAATTTGGGC |
| 56401 | GAGGGGAGAT | CTCTAGGACG | CTTCCCACAA | GCGTTGCTTA | GAGGCGGATT |
| 56451 | AGAAACGAAC | TGTTCTCTACA | CCCTTCTCCC | CAGGACTTCT | CTGCCCATTG |
| 56501 | CTGGGGGTGG | GGAGGGTCCA | CTGCTCATAT | GAGGCGCCTT | CCAGTGCGGC |
| 56551 | CTCCACTTGC | AATACCTTTC | CTTCCACTAG | TCTTCAATTG | TTCTAATTTT |

FIGURE 7U

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56601 AGTGCTGTTT GGTCAGTAGA ATCCCTTTGT CAGTTCAAAT CCTAATTTTG
56651 GTTAGAAGCA GGTATGGAG GAGAGAAGAG TGGTGTGGTA TGCCCTCCCT
56701 CCGGGGCTC AGAATGGAGC AAGCTAGGGA CGGGGACCGC AAGATAGTGG
56751 CTGTGTTCCA GAGGCATTGG GAGGGAAGGG GCGAGGCTCA GAAGAAAAGC
56801 TTGTCAC TGG GGAAGCGGG GCTCCCTGGC TGGGGTAGGA AAGGGAACCA
56851 AACCCAGCTC TTCCAGAACC CAGCTCTTCC AGCCCTGGGG AGTCAAGAGT
56901 GGATTCTGA GCATGGAAAT TCACTGCAGT CTCTTCTCCC ATTCACAC
56951 TTAGCAAGTA CCTGTATGCA CAGACAGCCT GGTTCAGGGC TCTATGCTGG
57001 CTGACTCTGG GGAATATGAT GGAGGATATA TACAGGAGGT CCAAGCCAGA
57051 TTACAAACTG CTATTACAAG ATCATTACCA CAAACCAAAA ATGCCAGTTG
57101 AATAGACATT CACTGATCGT CGACCATGTA TGCCAGGGAC GGATGCAAGG
57151 TTGGATAAGA CAGTGTATAC CCAGCGCAGT GGGGACCCAG AGGAAGGCAT
57201 AACTAACCGT GCTTGTATTAT GTAATATTGA TTGGGGCAGT ATCAAGACGG
57251 CTTCAGAGAC ATGGGGACAT GGAACATGG GGATATTACA GCTAATTTTG
57301 AAGTACAAAA AGGAATTTGC TGGGTGGAGA AGGGAGGAGT TTTGAGGGGA
57351 GGGGAGAGGA AGGATATTGT AGGCCAAAGG AATACTGTAA GAAAAACAA
57401 GGTGTGTTTT GAGATCTCTG GGCAGTTTGC TATGATGGGA GGGGCAGAGT
57451 GGCAGAGAGG AGGTATGGAG GGGTGAGCAG GGGCCAGATC AAACAGGGTG
57501 TTGTAGGCCA GGTAGAGGTT TAGCAGGAAT TCAGGGAGGG CATTAGGAGT
57551 GGTGACAAGT GAAATTACA TTTTAACTG GAGGCAGAGA CATCAGTGAA
57601 AAGGCCGAGG CAATAATCCA GGTGAGAAAT GGCTGGAAG AGGAAGAATG
57651 GTGAGAAATG GGTATTAAAT GAGATGGGAG AAGGAAGGAT AGTGAGGACC
57701 CCAGGATGCT CTCAGCTTTC TGGATGGAGT ACAGAGCCAT CTTGTCTAGG
57751 ATACTGAAGG AGAGCTTGTT TGGTTATGTA GAATTTTGGC GGGGGCGGCT
57801 GGTGGAGGGG GATGATGTCA CTCTGTCACC CAGGCTGGAG TGCAGTGGCG
57851 CAATCTCGGC TCACTGAAAC CTCTGCCTCC TGGGTTCAAG TGATTCCTCT
57901 GCCTCAGCCT CCCAAATAGC TGGGATTACA GGTGCCTGTC ACCATGCTCTG
57951 GCTAATTTTT GTATTTT TAGAGATGGG GTTTCACCAT GTTGCCAGT
58001 CTAGTCTCGA ACTCCTGACC TCAGGTGATC TGCCCTCCCA GCTCTCCCA
58051 AGTGCTGGGA TTACAGGTAT GAGCCACCAT GCCTGGACTG GTTATGTAGA
58101 ATTTGAGGAG ACTATGTTG GTTGCCAGGT TGATAGCAG TGGATCTGG
58151 GCTGAAGACA GATCTGAGAG TCACCAGCAT ATGATGGTCT TTGAAGCTAC
58201 AGCAGAGAAT GAGGTCTCTT GGAGAGAAAT GCACAAAATC AGAAGACAGC
58251 CTGGCTCTGA GGACGGAGGA AAAACCTTT GCAGGAGACT GAGAATGAAC
58301 AGGTAGACAG GGAGGACGAA AACCACGAAG GGAAGTGTTA CCAGAGTCAA
58351 GAGAAAGGGC TTGACAGGGA GTGGCCAGGC TCTTGCTTGC AGCCTTGTC
58401 CTGCAGCTAA GTTGCCCTGA CTTCAGGCAC CCCACCTGT CACTACTGTA
58451 CTGGTCTTCC TGCTTTCCCT TTACAGGCTA GATGTTCTGC ATCCAGCCAG
58501 GGCTAGCTGA GGGGGGCCAA TTCTGGGGG ACCCACCTTC TGGATTATGT
58551 CAGCCCGAGC TCCAACCAGA CAGCAACTCC AACTTCATGG CAAGTGCCAA
58601 GGATGCTAAC GAGAATTGGC ATGGGATGCC AGGCAGAGTG GAACCTATCC
58651 TGAGGAGGAG CTCTCTGAG TCACCCTCTG ACAACCAAGC CTTCCAGGCC
58701 CTTGATCCCC CTGAGGAAGG GGTGCGCAGC CCCCAGAGG GGGCAGAGAT
58751 TCCCGGGGCT GAGCCTGAGA AGATGGGTGG TGCTGGCACA GTCTGCTCCC
58801 CTCTGGAGGA CAACGGCTAT GCCAGCAGT CCCTGAG

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FIGURE 7V